



DRAFT REPORT

Stage 1 Archaeological Assessment

*Courtice Employment Lands and Southwest Courtice Secondary Plan Areas,
Municipality of Clarington, Durham County, Ontario*

Submitted to:

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Executive Summary

The Executive Summary highlights key points from the report only; for complete information and findings, as well as the limitations, the reader should examine the complete report.

Courtice and the Municipality of Clarington is located on the ancestral and Treaty territory of the Michi Saagiig and Chippewa Nations known collectively as the Williams Treaties First Nations, which include: Curve Lake, Hiawatha, Scugog Island, Alderville, Rama, Beausoleil, and Georgina Island First Nations. The Williams Treaties First Nations are the stewards and caretakers of these lands and waters in perpetuity, as they have been for thousands of years, and they continue to maintain this responsibility to ensure their health and integrity for generations to come.

A Stage 1 archaeological assessment was conducted on behalf of the Municipality of Clarington c/o Urban Strategies Inc. (the client), by Golder Associates Ltd. (Golder), in support of the Courtice Employment Lands (CEL) Secondary Plan and Southwest Courtice (SWC) Secondary Plan Update under the *Planning Act* for several properties in the Municipality of Clarington, Ontario. The study area is approximately 550 hectares in size (CEL: 400 ha; SWC: 150 ha) and is currently in mixed use as agricultural, commercial, and residential land. The study area includes several lots and concessions within Darlington Township in the historic County of Durham, now the Municipality of Clarington, Ontario (Map 1).

The objective of the Stage 1 assessment was to compile all available information about the known and potential archaeological resources within the study area and to provide direction for the protection, management and/or recovery of these resources, consistent with Ministry of Heritage, Sport, Tourism, and Culture Industries (MHSTCI) guidelines (MHSTCI 2011). The Stage 1 background study found potential to exist within the study area for the recovery of pre-contact and historic Indigenous and Euro-Canadian archaeological resources (Map 6). Given the findings of the Stage 1 archaeological assessment the following recommendations are made:

- 1) Portions of the Study Area that were identified as previously disturbed, are considered to exhibit low archaeological potential and no further assessment is recommended.
- 2) Lands encompassed within the Study Area limits which have been previously subjected to archaeological assessment(s) and cleared by the MHTSCI of further archaeological concern are recommended to be exempt from further assessment.
- 3) The known cemeteries/burial grounds within the Study Area exhibit archaeological potential; it is recommended that these areas be subject to Stage 2 archaeological assessment in consultation with the MHTSCI and BAO prior to ground disturbance associated with any future development; the area of archaeological potential illustrated on Map 6 includes a 10-metre protective buffer.
- 4) Those portions of the Study Area that exhibit archaeological potential for both Indigenous and historical Euro-Canadian archaeological resources; are recommended to be subject to a Stage 2 archaeological assessment prior to any planned development or ground impacts. It is recommended that areas of archaeological potential be subjected to test pit or pedestrian survey at 5 m intervals in accordance with Sections 2.1.1 and 2.1.2 of the *Standards and Guidelines for Consultant Archaeologist* (MHTSCI 2011).

The MHSTCI is asked to review the results and recommendations presented herein and accept this report into the Provincial Register of archaeological reports. The MHSTCI is also asked to provide a letter concurring with the results presented herein.

Study Limitations

Golder has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty expressed or implied is made.

This report has been prepared for the specific site, design objective, developments and purpose described to Golder by Municipality of Clarington c/o Urban Strategies Inc. (the client). The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without Golder's express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the Client, Golder may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to Golder. The report, all plans, data, drawings and other documents as well as electronic media prepared by Golder are considered its professional work product and shall remain the copyright property of Golder, who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell or otherwise make available the report or any portion thereof to any other party without the express written permission of Golder. The Client acknowledges that electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of Golder's report or other work products.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the Client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study comply with those identified in the Ministry of Heritage, Sport, Tourism, and Culture Industries' 2011 *Standards and Guidelines for Consultant Archaeologists*.

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Development Map

1.0 PROJECT CONTEXT

1.1 Development Context

A Stage 1 archaeological assessment was conducted on behalf of the Municipality of Clarington c/o Urban Strategies Inc. (the client), by Golder Associates Ltd. (Golder), in support of the Courtice Employment Lands Secondary Plan and Southwest Courtice Secondary Plan Update under the *Planning Act* for several properties in the Municipality of Clarington, Ontario. The study area includes several lots and concessions within Darlington Township in the historic County of Durham, now the Municipality of Clarington, Ontario (Map 1).

The Municipality of Clarington is in the process of developing a Courtice Employment Lands Secondary Plan and updating the Southwest Courtice Secondary Plan. The two regions that comprise the study area of this Stage 1 assessment are presented in Appendix A and Map 1:

- Employment and Transportation Hub: Courtice Employment Lands (CEL); and,
- Residential: Southwest Courtice (SWC).

The study area was defined by the boundaries of the secondary plan areas, bound by Highway 401 to the south, Highway 418 and Courtice Road to the east, Bloor Street to the north and Townline Road South to the west. The study area is approximately 550 hectares in size (CEL: 400 ha; SWC: 150 ha) and is currently in mixed use as agricultural, commercial, and residential land (Images 1 – 27).

The objective of the Stage 1 archaeological assessment was to compile available information about the known and potential archaeological resources within the study area and to determine if a field survey (Stage 2) is required, as well as the recommended Stage 2 strategy. In compliance with the provincial standards and guidelines set out in the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011), the objectives of the Stage 1 archaeological assessment are as follows:

- To provide information about the study area's geography, history, previous archaeological fieldwork and current land conditions;
- To evaluate in detail the study area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property; and,
- To recommend appropriate strategies for Stage 2 survey.

To meet these objectives Golder archaeologists employed the following research strategies:

- A review of relevant archaeological, historic and environmental literature pertaining to the study area;
- A review of the land use history, including pertinent historic maps;
- A property inspection from the road right-of-way (ROW);
- An examination of the Ontario Archaeological Sites Database (OASD) to determine the presence of known archaeological sites in and around the project area; and
- An inquiry with the MHSTCI to determine previous archaeological assessments conducted in close proximity to the study area.

The Stage 1 archaeological assessment was conducted under archaeological consulting licence P327, issued to Dr. Henry Cary of Golder by the MHSTCI (PIF P327-0008-2019). The property inspection and photo documentation were completed from the publicly accessible road right-of-way (ROW).

1.2 Historical Context

1.2.1 General Overview of the Pre-Contact Period in Southern Ontario

The culture history of south-central Ontario, based on Ellis and Ferris (1990), is summarised in Table 1.

Table 1: Pre-contact cultural chronology for south-central Ontario

Period	Characteristics	Time Period	Comments
Early Paleo	Fluted Projectiles	ca. 11000 – 8400 BCE	spruce parkland/caribou hunters
Late Paleo	Hi-Lo Projectiles	ca. 8400 – 8000 BCE	smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	ca. 8000 – 6000 BCE	slow population growth
Middle Archaic	Brewerton-like points	ca. 6000 – 2500 BCE	environment similar to present
Late Archaic	Lamoka (narrow points)	ca. 2500 – 1800 BCE	increasing site size
	Broadpoints	ca. 1800 – 1500 BCE	large chipped lithic tools
	Small Points	ca. 1500 – 1100 BCE	introduction of bow hunting
Terminal Archaic	Hind Points	ca. 1100 – 950 BCE	emergence of true cemeteries
Early Woodland	Meadowood Points	ca. 950 – 400 BCE	introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	ca. 400 BCE – 500 CE	increased sedentism
Transitional Woodland	Princess Point	ca. 500 – 1050 CE	introduction of corn
Late Woodland	Early Late Woodland	ca. 900 – 1300 CE	emergence of agricultural villages
	Middle Late Woodland	ca. 1300 – 1400 CE	long longhouses (100m +)
	Late Woodland	ca. 1400 – 1650 CE	tribal warfare and displacement

Paleo Period

The first human occupation of south-central Ontario begins just after the end of the Wisconsin Glacial Period. Although there were a complex series of ice retreats and advances which played a large role in shaping the local topography, south-central Ontario was finally ice free by 12,500 years ago.

The first human settlement can be traced back 11,000 years, when this area was settled by Indigenous groups that had been living south of the Great Lakes. The period of these early Indigenous inhabitants is known as the Paleo Period (Ellis and Deller 1990).

Our current understanding of settlement patterns of Early Paleo peoples suggests that small bands, consisting of probably no more than 25-35 individuals, followed a pattern of seasonal mobility extending over large territories (Ellis and Deller 1990). Early Paleo sites tend to be located in elevated locations on well-drained loamy soils. Many of the known sites were located on former beach ridges associated with glacial lakes. There are a few extremely large Early Paleo sites, such as one located close to Parkhill, Ontario, which covered as much as six hectares. It appears that these sites were formed when the same general locations were occupied for short periods of time over the course of many years. Given their placement in locations conducive to the interception of migratory mammals such as caribou, it has been suggested that they may represent communal hunting camps. There are also smaller Early Paleo camps scattered throughout the interior of southwestern and south-central Ontario, usually situated adjacent to wetlands.

Research suggests that population densities were very low during the Early Paleo Period (Ellis and Deller 1990:54). Archaeological examples of Early Paleo sites are rare.

The Late Paleo Period (8400 – 8000 BCE) has been less researched and is consequently more poorly understood. By this time the environment of south-central Ontario was coming to be dominated by closed coniferous forests with some minor deciduous elements. It seems that many of the large game species that had been hunted in the early part of the Paleo Period had either moved further north, or as in the case of the mastodons and mammoths, become extinct.

Like the Early Paleo peoples, Late Paleo peoples covered large territories as they moved about in response to seasonal resource fluctuations. On a province wide basis Late Paleo projectile points are far more common than Early Paleo materials, suggesting a relative increase in population.

The end of the Late Paleo Period was heralded by numerous technological and cultural innovations that appeared throughout the Archaic Period. These innovations may be best explained in relation to the dynamic nature of the post-glacial environment and region-wide population increases.

Archaic Period

During the Early Archaic Period (8000 – 6000 BCE), the jack and red pine forests that characterized the Late Paleo environment were replaced by forests dominated by white pine with some associated deciduous trees (Ellis et al. 1990:68-69). One of the more notable changes in the Early Archaic Period is the appearance of side and corner-notched projectile points. Other significant innovations include the introduction of ground stone tools such as celts and axes, suggesting the beginnings of a woodworking industry. The presence of these often large and not easily portable tools suggests there may have been some reduction in the degree of seasonal movement, although it is still suspected that population densities were quite low, and band territories large.

During the Middle Archaic Period (6000 – 2500 BCE) the trend to more diverse toolkits continued, as the presence of netsinkers suggest that fishing was becoming an important aspect of the subsistence economy. It was also at this time that "bannerstones" were first manufactured.

Bannerstones are carefully crafted ground stone devices that served as a counterbalance for *atlatls* or spear-throwers. Another characteristic of the Middle Archaic Period is an increased reliance on local, often poorer quality, chert resources for the manufacturing of projectile points and other stone tools. It seems that during

earlier periods, when groups occupied large territories, it was possible for them to visit a primary outcrop of high-quality chert at least once during their seasonal round. However, during the Middle Archaic Period, groups inhabited smaller territories that often did not encompass a source of high-quality raw material. In these instances, lower quality materials which had been deposited by the glaciers in the local till and river gravels were utilized.

This reduction in territory size was probably the result of gradual region-wide population growth which led to the infilling of the landscape. This process forced a reorganization of Indigenous subsistence practices, as more people had to be supported from the resources of a smaller area. During the latter part of the Middle Archaic Period, technological innovations such as fish weirs have been documented as well as stone tools especially designed for the preparation of wild plant foods.

It is also during the latter part of the Middle Archaic Period that long-distance trade routes began to develop, spanning the northeastern part of the continent. In particular, native copper tools manufactured from a source located northwest of Lake Superior were being widely traded (Ellis et al. 1990:66). By 3500 BCE the local environment had stabilized and began to reflect the more modern landscape (Ellis et al. 1990:69).

During the Late Archaic Period (2500 – 950 BCE) the trend towards decreased territory size and a broadening subsistence strategy continued. Late Archaic sites are far more numerous than either Early or Middle Archaic sites, and it seems that the local population had expanded. It is during the Late Archaic Period that the first true cemeteries appear. Before this time individuals were interred close to the location where they died. During the Late Archaic Period, if an individual died while his or her group happened to be at some distance from their group cemetery, the bones would be kept until they could be placed in the cemetery. Consequently, it is not unusual to find disarticulated skeletons, or even skeletons lacking minor elements such as fingers, toes or ribs, in Late Archaic burial pits.

The appearance of cemeteries during the Late Archaic Period has been interpreted as a response to increased population densities and competition between local groups for access to resources. It is argued that cemeteries would have provided strong symbolic claims over a local territory and its resources. These cemeteries are often located on heights of well-drained sandy/gravel soils adjacent to major watercourses.

This suggestion of increased territoriality is also consistent with the regionalized variation present in Late Archaic Period projectile point styles. It was during the Late Archaic Period that distinct local styles of projectile points appear. Also, it was during the Late Archaic Period that trade networks which had been established during the Middle Archaic Period continued to flourish. Native copper from northern Ontario and marine shell artifacts from as far away as the Mid-Atlantic coast are frequently encountered as grave goods at Southern Ontario sites. Other artifacts such as polished stone pipes and banded slate gorgets also appear on Late Archaic sites in Southern Ontario. One of the more unusual and interesting of the Late Archaic Period artifacts is the birdstone, which are small, bird-like effigies usually manufactured from green banded slate.

Woodland Period

The Early Woodland Period (950 – 400 BCE) is distinguished from the Late Archaic Period primarily by the addition of ceramic technology. While the introduction of pottery provides a useful demarcation point for archaeologists, it may have made less difference in the lives of the Early Woodland peoples. The first pots were crudely constructed, thick walled, and friable. It has been suggested that they were used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil. These vessels were not easily portable, and individual pots likely did not have a long use life. There have also been numerous Early Woodland sites

located at which no pottery was found, suggesting that these poorly constructed undecorated vessels had yet to assume a central position in the day-to-day lives of Early Woodland peoples.

Other than the introduction of this limited ceramic technology, the lifeways of Early Woodland peoples show a great deal of continuity with the preceding Late Archaic Period. For instance, birdstones continue to be manufactured, although the Early Woodland varieties have "pop-eyes" which protrude from the sides of their heads.

Likewise, the thin, well-made projectile points which were produced during the terminal part of the Archaic Period continue in use. However, the Early Woodland Period variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance.

The trade networks which were established in the Middle and Late Archaic Periods also continued to function, although there does not appear to have been as much trade in marine shell during the Early Woodland Period. During the last 200 years of the Early Woodland Period, projectile points manufactured from high quality raw materials from the American Midwest begin to appear on sites in southwestern Ontario.

In terms of settlement and subsistence patterns, the Middle Woodland Period (400 BCE – 500 CE) provides a major point of departure from the Archaic and Early Woodland Periods. While Middle Woodland peoples still relied on hunting and gathering to meet their subsistence requirements, fish were becoming an even more important part of the diet.

In addition, Middle Woodland peoples relied much more extensively on ceramic technology. Middle Woodland vessels are often heavily decorated with hastily impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of Middle Woodland vessels are easily identifiable.

It is also at the beginning of the Middle Woodland Period that rich, densely occupied sites appear along the margins of major rivers and lakes. While these areas had been utilized by earlier peoples, Middle Woodland sites are significantly different in that the same location was occupied off and on for as long as several hundred years and large deposits of artifacts often accumulated. Unlike earlier seasonally utilized locations, these Middle Woodland sites appear to have functioned as base camps, occupied off and on over the course of the year. There are also numerous small upland Middle Woodland sites, many of which can be interpreted as special purpose camps from which localized resource patches were exploited. This shift towards a greater degree of sedentism continues the trend witnessed from at least Middle Archaic times and provides a prelude to the developments that follow during the Late Woodland Period.

The Late Woodland Period began with a shift in settlement and subsistence patterns involving an increasing reliance on corn horticulture (Fox 1990:185; Smith 1990; Williamson 1990:312). Corn may have been introduced into southwestern Ontario from the American Midwest as early as 600 CE or a few centuries before. Corn did not become a dietary staple, however, until at least three to four hundred years later, when the cultivation of corn gradually spread into south-central and southeastern Ontario.

During the early Late Woodland Period, particularly within the Princess Point Complex (*circa* 500-1050 CE), a number of archaeological material changes have been noted including the appearance of triangular projectile point styles, first seen during this period beginning with the Levanna form; cord-wrapped stick decorated ceramics using the paddle and anvil forming technique evolving from the mainly coil-manufactured and dentate stamped and pseudo-scallop shell impressed ceramics; and if not appearance, increasing use of maize (*Zea mays*) as a

food source (e.g., Burse 1995; Crawford et al. 1997; Ferris and Spence 1995:103; Martin 2004 [2007]; Ritchie 1971:31-32; Spence et al. 1990; Williamson 1990:299).

The Late Woodland Period is widely accepted as the beginning of agricultural life ways in south-central Ontario. Researchers have suggested that a warming trend during this time may have encouraged the spread of maize into southern Ontario, providing a greater number of frost-free days (Stothers and Yarnell 1977).

By approximately 600 CE, a significant shift in settlement patterns was occurring throughout the area. People began to move from the seasonally occupied waterway-oriented campsites to more permanent village sites predominately situated on higher ground, often on well-drained sandy soils. These settlements, generally only a few acres in size, were often surrounded by palisade walls where the traditional “longhouse” structure was introduced (MCR 1981).

These early longhouse-type structures were actually not all that large, averaging only 12.4 metres in length (Dodd et al. 1990:349; Williamson 1990:304-305). It is also quite common to find the outlines of overlapping house structures, suggesting that these villages were occupied long enough to necessitate re-building.

The Jesuits reported that the Huron moved their villages once every 10 – 15 years, when the nearby soils had been depleted by farming and conveniently collected firewood grew scarce (Tooker 1964). It seems likely that Early Late Woodland villages were inhabited for considerably longer, as the populations relied less heavily on corn than did later groups, and their villages were much smaller, placing less demand on nearby resources.

Judging by the presence of carbonized corn kernels and cob fragments recovered from sub-floor storage pits, agriculture was becoming a vital part of the Early Late Woodland economy. However, it had not reached the level of importance it would in the Middle and Late-Late Woodland Periods. There is ample evidence to suggest that more traditional resources continued to be exploited and comprised a large part of the subsistence economy. Seasonally occupied special purpose sites relating to deer procurement, nut collection, and fishing activities, have all been identified. While beans are known to have been cultivated later in the Late Woodland Period, they have yet to be identified on Early Late Woodland sites.

The Middle Late Woodland Period (1300 – 1400 CE) witnessed several interesting developments in terms of settlement patterns and artifact assemblages. Changes in ceramic styles have been carefully documented, allowing the placement of sites in the first or second half of this 100-year period. Moreover, villages, which averaged approximately 0.6 hectares in extent during the Early Late Woodland Period, now consistently range between one and two hectares in size. House lengths also change dramatically, more than doubling to an average of 30 metres, while houses of up to 45 metres have been documented. This increase in longhouse length has been variously interpreted. The simplest possibility is that increased house length is the result of a gradual, natural increase in population (Dodd et al. 1990:323, 350, 357; Smith 1990). However, this does not account for the sudden shift in longhouse lengths around 1300 CE. Other possible explanations involve changes in economic and socio-political organization (Dodd et al. 1990:357). One suggestion is that during the Middle Late Woodland Period small villages were amalgamating to form larger communities for mutual defence (Dodd et al. 1990:357). If this was the case, the more successful military leaders may have been able to absorb some of the smaller family groups into their households, thereby requiring longer structures. This hypothesis draws support from the fact that some sites had up to seven rows of palisades, indicating at least an occasional need for strong defensive measures. There are, however, other Middle Late Woodland villages which had no palisades present (Dodd et al. 1990). More research is required to evaluate these competing interpretations.

The lay-out of houses within villages also changes dramatically by 1300 CE. During the Early Late Woodland Period villages were haphazardly planned, with houses oriented in various directions. During the Middle Late Woodland Period villages are organized into two or more discrete groups of tightly spaced, parallel aligned, longhouses. It has been suggested that this change in village organization may indicate the initial development of the clans which were a characteristic of the historically known Iroquoian peoples (Dodd et al. 1990:358).

1.2.2 Michi Saagiig Historical Context

The following section was graciously prepared by Gitiga Migizi, a respected Elder and Knowledge Keeper of the Michi Saagiig Nation, and provided by Dr. Julie Kapyrka of Curve Lake First Nation.

The traditional homelands of the Michi Saagiig (Mississauga Anishinaabeg) encompass a vast area of what is now known as southern Ontario. The Michi Saagiig are known as “the people of the big river mouths” and were also known as the “Salmon People” who occupied and fished the north shore of Lake Ontario where the various tributaries emptied into the lake. Their territories extended north into and beyond the Kawarthas as winter hunting grounds on which they would break off into smaller social groups for the season, hunting and trapping on these lands, then returning to the lakeshore in spring for the summer months.

The Michi Saagiig were a highly mobile people, travelling vast distances to procure subsistence for their people. They were also known as the “Peacekeepers” among Indigenous nations. The Michi Saagiig homelands were located directly between two very powerful Confederacies: The Three Fires Confederacy to the north and the Haudenosaunee Confederacy to the south. The Michi Saagiig were the negotiators, the messengers, the diplomats, and they successfully mediated peace throughout this area of Ontario for countless generations.

Michi Saagiig oral histories speak to their people being in this area of Ontario for thousands of years. These stories recount the “Old Ones” who spoke an ancient Algonquian dialect. The histories explain that the current Ojibwa phonology is the 5th transformation of this language, demonstrating a linguistic connection that spans back into deep time. The Michi Saagiig of today are the descendants of the ancient peoples who lived in Ontario during the Archaic and Paleo-Indian periods. They are the original inhabitants of southern Ontario, and they are still here today.

The traditional territories of the Michi Saagiig span from Gananoque in the east, all along the north shore of Lake Ontario, west to the north shore of Lake Erie at Long Point. The territory spreads as far north as the tributaries that flow into these lakes, from Bancroft and north of the Haliburton highlands. This also includes all the tributaries that flow from the height of land north of Toronto like the Oak Ridges Moraine, and all of the rivers that flow into Lake Ontario (the Rideau, the Salmon, the Ganaraska, the Moira, the Trent, the Don, the Rouge, the Etobicoke, the Humber, and the Credit, as well as Wilmot and 16 Mile Creeks) through Burlington Bay and the Niagara region including the Welland and Niagara Rivers, and beyond. The western side of the Michi Saagiig Nation was located around the Grand River which was used as a portage route as the Niagara portage was too dangerous. The Michi Saagiig would portage from present-day Burlington to the Grand River and travel south to the open water on Lake Erie.

Michi Saagiig oral histories also speak to the occurrence of people coming into their territories sometime between 500-1000 A.D. seeking to establish villages and a corn growing economy – these newcomers included peoples that would later be known as the Huron-Wendat, Neutral, Petun/Tobacco Nations. The Michi Saagiig made Treaties with these newcomers and granted them permission to stay with the understanding that they were visitors in these lands. Wampum was made to record these contracts, ceremonies would have bound each nation to their respective responsibilities within the political relationship, and these contracts would have been renewed

annually (see Gitiga Migizi and Kapyrka 2015). These visitors were extremely successful as their corn economy grew as well as their populations. However, it was understood by all nations involved that this area of Ontario were the homeland territories of the Michi Saagiig.

The Odawa Nation worked with the Michi Saagiig to meet with the Huron-Wendat, the Petun, and Neutral Nations to continue the amicable political and economic relationship that existed – a symbiotic relationship that was mainly policed and enforced by the Odawa people.

Problems arose for the Michi Saagiig in the 1600s when the European way of life was introduced into southern Ontario. Also, around the same time, the Haudenosaunee were given firearms by the colonial governments in New York and Albany which ultimately made an expansion possible for them into Michi Saagiig territories. There began skirmishes with the various nations living in Ontario at the time. The Haudenosaunee engaged in fighting with the Huron-Wendat and between that and the onslaught of European diseases, the Iroquoian speaking peoples in Ontario were decimated.

The onset of colonial settlement and missionary involvement severely disrupted the original relationships between these Indigenous nations. Disease and warfare had a devastating impact upon the Indigenous peoples of Ontario, especially the large sedentary villages, which mostly included Iroquoian speaking peoples. The Michi Saagiig were largely able to avoid the devastation caused by these processes by retreating to their wintering grounds to the north, essentially waiting for the smoke to clear.

Michi Saagiig Elder Gitiga Migizi (2017) recounts:

“We weren’t affected as much as the larger villages because we learned to paddle away for several years until everything settled down. And we came back and tried to bury the bones of the Huron but it was overwhelming, it was all over, there were bones all over – that is our story.

There is a misnomer here, that this area of Ontario is not our traditional territory and that we came in here after the Huron-Wendat left or were defeated, but that is not true. That is a big misconception of our history that needs to be corrected. We are the traditional people, we are the ones that signed treaties with the Crown. We are recognized as the ones who signed these treaties and we are the ones to be dealt with officially in any matters concerning territory in southern Ontario.

We had peacemakers go to the Haudenosaunee and live amongst them in order to change their ways. We had also diplomatically dealt with some of the strong chiefs to the north and tried to make peace as much as possible. So we are very important in terms of keeping the balance of relationships in harmony.

Some of the old leaders recognized that it became increasingly difficult to keep the peace after the Europeans introduced guns. But we still continued to meet, and we still continued to have some wampum, which doesn’t mean we negated our territory or gave up our territory – we did not do that. We still consider ourselves a sovereign nation despite legal challenges against that. We still view ourselves as a nation and the government must negotiate from that basis.”

Often times, southern Ontario is described as being “vacant” after the dispersal of the Huron-Wendat peoples in 1649 (who fled east to Quebec and south to the United States). This is misleading as these territories remained the homelands of the Michi Saagiig Nation.

The Michi Saagiig participated in eighteen treaties from 1781 to 1923 to allow the growing number of European settlers to establish in Ontario. Pressures from increased settlement forced the Michi Saagiig to slowly move into

small family groups around the present day communities: Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Scugog Island First Nation, New Credit First Nation, and Mississauga First Nation.

The Michi Saagiig have been in Ontario for thousands of years, and they remain here to this day.

1.2.3 Post-Contact Indigenous Occupation of Southern Ontario

The post-contact Indigenous occupation of southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking peoples by the New York State Iroquois and the subsequent return of Algonkian-speaking groups from northern Ontario at the end of the 17th century and beginning of the 18th century (Schmalz 1991). Following the introduction of Europeans to North America, the nature of Indigenous settlement size, population distribution, and material culture shifted as settlers began to colonize the land. Despite this shift in Indigenous life ways, Indigenous peoples of southern Ontario have left behind archaeologically significant resources throughout southern Ontario which show continuity with past peoples, even if this connection has not been recorded in historical Euro-Canadian documentation.

The Project Area is situated within the former Geographic Township of Darlington, County of Durham, Ontario.

British agents began a series of treaties with local Indigenous communities and in 1788, the British authorities made a treaty with the Mississaugas by which the community gave up all the land along Lake Ontario from Toronto to Brockville as far north as the Rideau Lakes, Rice Lake, Scugog Lake, and Lake Simcoe (Borg 1975). This treaty, the Gunshot Treaty, was not written and no lands were delineated; the treaty was to include lands between the shore of Lake Ontario to where a gunshot could be heard. The purpose of this treaty was to facilitate the movement of British troops between Frontenac (Kingston) and York (Toronto).

The Project Area is within lands that were part of the assumed Gunshot Treaty land and subsequent Williams Treaties made between the Crown and the 'Chippewa Indians of Christian Island, Georgina Island, and Rama' on October 31, 1923 and the 'Mississauga Indians of Rice Lake, Mud Lake, Scugog Lake and Alderville' on November 15, 1923. As detailed in the below passage, the Williams Treaties include:

Parts of the Counties of Northumberland, Durham, Ontario and York...[c]ommencing at the point where the easterly limit of that portion of the lands said to have been ceded...[as part of Treaty Number 13] intersects the northerly shore of Lake Ontario; thence northerly along the said easterly and northerly limits of the confirmed tract to the Holland River; thence northerly along the Holland River and along the westerly shore of Lake Simcoe and Kempenfeldt Bay to the narrows between Lake Couchiching and Lake Simcoe; thence south easterly along the shores of Lake Simcoe to the Talbot River; thence easterly along the Talbot River to the boundary between the Counties of Victoria and Ontario; thence southerly along that boundary to the north west angle of the Township of Darlington; thence along the northern boundary of the Township of Darlington, Clarke, Hope and Hamilton to Rice Lake; thence along the southern shore of said Lake to River Trent, and along the River Trent to Bay of Quinte; thence westerly and southerly along the shore of the Bay of Quinte to the road leading to Carrying Place and Wellers Bay; then westerly along the northern shore of Lake Ontario to the place of beginning.

Morris 1943:62

1.2.4 Euro-Canadian Settlement

1.2.4.1 County of Durham

Durham County was comprised of a total of six townships: Cartwright, Cavan, Clark, Darlington, Hope, and Manvers. The survey of Durham County began as early as 1792 and continued well into the 19th century. Durham County was home to several of the towns that formed the foundation on which settlement in central Ontario took hold. These early communities included, Bowmanville, the Village of Newcastle, and Port Hope.

In the early history of Canada Durham County played a key role in linking the larger centers of York, Kingston and Montreal. Durham County's southern townships benefited from their proximity to the King's Road (also called Danforth road or Kingston road, now called Highway 2) as it was a key route for mail, cargo, and people traveling east and west.

Just as in the other counties and townships of the region, the early settler experience in Durham County was harsh and while early Crown patents were plentiful the isolation and lack of commercial enterprises, such as mills and general stores, dissuaded all but the most dedicated settlers from taking up residence in Durham County.

Prior to 1830 very little of Durham County was settled by Europeans. The settlements that did exist were restricted to the lots adjacent to Lake Ontario and individuals who did travel through the area record the unsettled nature of the landscape (Squair 1927:55). Early Crown deeds stated that all white pine remained the property of and for the sole use of the Crown. Such an arrangement allowed the Crown to send lumbermen onto a property to harvest as much white pine as suited their needs (Squair 1927:7). White pine was an essential component of the British military machine, and the massive white pine of Canada was highly praised for the construction of masts of the vast wooden war ships that defended the reaches of the British Empire. In addition to its use as ships masts the British demand for Canadian timber was bolstered by the high tariffs placed against Baltic timber imports as a result of the Napoleonic wars (Campey 2012: 57). The high demand for timber products in general allowed early settlers to generate income from the forest products they were removing to accommodate agricultural practices. In addition to timber, the ash generated from the burning of slash piles comprised of undergrowth and unmarketable timber was sold to the growing potash industry. Settlers could further supplement their incomes through forestry by selling cord wood to the railway once it arrived in the area (Squair 1927).

On January 1, 1974, approximately half of Durham County was merged with Ontario County to create the Regional Municipality of Durham.

1.2.4.2 Township of Darlington

Darlington Township was initially surveyed by Samuel Wilmot under the direction of Augustus Jones between 1791 and 1792 (Belden & Co. 1878). Following this survey the area was opened to settlement and shortly thereafter the first settlers are recorded to have arrived. Based on available records the first settlers to arrive in Darlington Township were Mr. John Burk, Mr. John Tull and Mr. Roger Conat (Squair 1927: Belden & Co. 1878). These men arrived at Port Darlington from the United States on the 2nd of October 1794, enticed to the area by the decree of Lieutenant-Governor Simcoe that promised each male eighteen years of age and older 200 acres of free land (OG 2014). As with other township along the north shore of Lake Ontario, Darlington became home to many United Empire Loyalist (UEL) settlers as well as new immigrants from the British Empire.

In 1805 the first sawmill was opened in the Town of Darlington Mills (now Bowmanville); the opening of this sawmill was quickly followed by the establishment of several other mills in the area, filling a much-needed market. Prior to 1805 the closest grist mill was located some 60 miles away in Myer's Mills (Belden & Co. 1878).

Settlement of the township began slowly at first, with only 118 individuals residing in the area by 1810 but during the 1830s a large influx of English, Scots, Irish, Canadian, and American families had increased the population by 1842 to 3,000, with an additional 500 inhabitants living in Bowmanville (Smith 1846). By this point, six grist mills, nine sawmills, and one distillery were operating within the township.

Although largely dependent on services offered in the Town of Bowmanville, the remainder of Darlington Township still supported merchants, three cheese factories, one woollen factory, flouring mills, and grist mills in the rural communities and post office villages of Hampton, Tyrone, Enniskillen, Haydon, Salina, and Enfield.

At the time of the creation of the Region of Durham in 1974 the townships of Darlington and Clarke were amalgamated with the Town of Bowmanville and the village of Newcastle as the Town of Newcastle. In 1993, the Town of Newcastle was renamed the Municipality of Clarington.

1.2.4.3 Lot Specific Histories

The study area includes parts of Lots 26 to 35, Concession 1 and small portions of Lots 34 and 35, Concession 2 and Lots 26 to 34, Broken Front (BF) in the former Darlington Township, Durham County, now the Municipality of Clarington, Durham Region.

Lot 26, Concession BF

The 1861 map illustrates that the portion of Lot 26 within the study area was owned by John C. Trull J.P (Map 2). No structures were illustrated within the study area.

The 1871 Census indicates that John C. Trull (Colonel of Militia) lived on Lot 25, Concession BF, potentially in the structure that was illustrated just east of the study area in 1861 and 1878.

The 1871 Census lists John Foley as the tenant of 100 acres and with his place of enumeration as Lot 26, Concession BF. Foley (age: 33) was born in England and married an Ontario woman named Margaret (31) and had the following children living with them in 1871: E.R. (7), Mariette (5), William James (3), and Isabella (2). They also had John Henry Hamlin living in their home, indicated as a labourer. Of the 100 acres that were tenanted by John Foley, 98 of them were classed as improved: 10 in pasture and 1 in orchard/garden. Six acres planted in wheat produced 110 bushels of grain. The farm was also recorded as having produced bushels of the following crops: barley (95), oats (190), potatoes (40), turnips (500), and apples (20).

John C. Trull J.P. remains listed on Lot 26 in the 1878 historical atlas (Map 3). No structures were illustrated within the study area.

Lot 27, Concession BF

The 1861 map illustrates that the portion of Lot 27 within the study area was owned by Henry Pearce. No structures were illustrated within the study area.

The 1871 Census lists Henry Pearce as the owner of 327 acres and identified his place of enumeration as Lot 26, Concession 1. His family and farm are described further in the section for Lot 26, Concession 1 below.

The 1871 Census also lists a Cornelius Osborn as the tenant on 84 acres of Lot 27, Concession BF. It is assumed that his occupation as tenant was on the remainder of Lot 27, Concession BF, beyond the study area, that was owned by Richard Osborn.

The 1878 map continues to indicate that Henry Pearce owned the portion of Lot 27 within the study area. No structures were illustrated within the study area.

Lot 28, Concession BF

The 1861 map illustrates that the portion of Lot 28 within the study area was divided by three owners: Richard Osborn to the east, Samuel Arnold to the south-west, and Levi Annis to the north-west. No structures were illustrated within the study area (Map 2).

The 1871 Census listed a Charles Osborn as the tenant on 90 acres of Lot 28, Concession BF. It is assumed that his occupation as tenant was on the land owned by Richard Osborn. Charles (age: 35) was born in Ontario as was his wife Ellen (33) and had the following children living with them in 1871: Ada (8), Ellen (7), and Richard (4). Of the 90 acres that were tenanted by Charles Osborn, all of them were classed as improved: 10 in pasture and 1 in orchard/garden. Fifteen acres planted in wheat produced 150 bushels of grain. The farm was also producing in bushels, the following crops: barley (300), oats (200), peas (100), potatoes (100), turnips (150), beets (150), carrots/roots (100), grass/clover (15), and apples (20).

The 1871 Census also listed a John Worden as the tenant on 103 acres of Lot 28, Concession BF. It is assumed that his occupation as tenant was on the land on the western half of the lot. John (age: 24) was born in Ontario as was his wife Charity (19) and had the following child living with them in 1871: Bobby (1mo). In this record the enumerator indicated that John was "of unsound mind". Of the 103 acres that were tenanted by John Worden, 100 of them were classed as improved: 15 in pasture and 2 in orchard/garden. Seventeen acres planted in wheat produced 100 bushels of grain. The farm was also noted to produce the noted bushels of the following crops: barley (500), oats (100), peas (80), potatoes (120), turnips (150), carrots/roots (50), grass/clover (30), and apples (70).

There is no change indicated in the 1878 historical map with listed Richard Osborn to the east, John Worden to the south-west, and L.A. [L. Annis] to the north-west. No structures were illustrated within the study area (Map 3).

Lot 29, Concession BF

The 1861 map (Map 2) identified that the portion of Lot 29 within the study area was owned by Richard Osborne. He also owned a small portion of Lot 30 to the west; a road was installed bordering Henry Trull's property rather than the lot line. No structures are illustrated within the study area.

The 1871 Census listed Richard Osborne as the owner of 145 acres on Lot 29 as well as being his home. Richard (age: 60) was born in England as was his wife Ann (60) and had the following Ontario-born child living with them in 1871: Eli (23). Of the 145 acres that are owned by Richard Osborne, 90 of them were classed as improved: 25 in pasture and 2 in orchard/garden. Fifteen acres planted in wheat produced 300 bushels of grain. The farm was also noted to produced in bushels: barley (400), peas (200), potatoes (150), turnips (200), beets (200), carrots/roots (150), grass/clover (20), and apples (400).

The lot ownership in the 1878 historical atlas remains unchanged with Richard Osborne owning the portion of Lot 29 within the study area. Two structures are illustrated in the north-east corner of the lot within the study area (Map 3).

Lot 30, Concession BF

The 1861 map (Map 2) illustrates that the portion of Lot 30 within the study area was owned by Henry Trull and possibly a second person but the notation is illegible. No structures are illustrated within the study area.

The 1871 Census identified Robert Skinner as a tenant with 120 acres of Lot 30, Concession BF. Robert (age: 50) was born in England as was his wife Elizabeth (56) and had the following children living with them in 1871: James (26), Levi (13), and Mary (10). All of the 120 acres were classed as improved: 18 in pasture and 3 in orchard/garden. Thirty acres planted in wheat produced 450 bushels of grain. The farm was also produced in bushels: barley (500), oats (100), peas (150), potatoes (150), turnips (200), beets (200), carrots/roots (100), grass/clover (30), and apples (30).

Henry Trull remains listed as owner of Lot 30 in the 1878 historical map. No structures are illustrated within the study area.

Lot 31, Concession BF

The 1861 map illustrates that Lot 31 was divided into two parcels: the east owned by John Pickel and the west by Malcolm Cameron. No structures are illustrated within the study area.

The 1871 Census listed John Osborne on Lot 31, as a tenant with 57 acres. John (age: 31) was born in Ontario and married an English woman named Catherine (28) and had the following children living with them in 1871: Herbert (5), Ernest (3), and Mark (1). Of the 57 acres that are tenanted by John Osborne, 50 of them were classed as improved: 12 in pasture and 1 in orchard/garden. Ten acres planted in wheat produced 50 bushels of grain. The farm was also produced in bushels: barley (300), oats (250), peas (150), potatoes (60), turnips (100), beets (100), and carrots/roots (150).

John Pickle remains the owner of the east side of Lot 31 in the 1878 historical atlas (Map 3) while the western side was then owned by R. Osborne with one structure illustrated in the north-west corner of the lot.

Lot 32, Concession BF

The 1861 historical map (Map 2) illustrates that the portion of Lot 32 within the study area was owned by Jesse Trull J.P. No structures are illustrated within the study area.

The 1871 Census lists Jesse Trull as the owner of 247 acres and identifies his place of enumeration as Lot 32, Concession BF. Jesse (age: 45) was born in Ontario, as was his wife Christiana (39) and had the following children living with them in 1871: Lewis (19), Agnes (17), Jane (15), Cameron (13), John (11), Mary (9), and Ira (1). Of the 247 acres that are owned by Jesse Trull, 210 of them were classed as improved: 30 in pasture and 5 in orchard/garden. Fifty-five acres planted in wheat produced 800 bushels of grain. The farm was also produced in bushels: barley (1600), oats (200), corn (100), potatoes (200), beets (300), and apples (200).

J. Trull remains listed as owner of Lot 32 in the 1878 historical atlas (Map 3). One structure is illustrated within the study area, west of Robinson creek.

Lot 33, Concession BF

The 1861 historical map (Map 2) illustrates that the portion of Lot 33 within the study area was owned by Barnard Burk and no structures are illustrated within the study area.

The 1871 Census lists John Burk as the tenant and resident on 80 acres of Lot 33, Concession BF. John (age: 24) was born in Ontario and appears to be head of household after the death of his father. The following members of family are also living in the home in 1871: Barbara (54), Harvey (24), Ann (18), and Sarah (16). Of the 80 acres that are tenanted by John Burk, 70 of them were classed as improved: 9 in pasture and 1 in orchard/garden. Sixteen acres planted in wheat produced 200 bushels of grain. The farm was also produced in noted bushels: barley (500), oats (60), peas (16), potatoes (90), and apples (40).

J. Trull remained listed on Lot 33 in the 1878 historical atlas (Map 3). No structures are illustrated within the study area.

Lot 34, Concession BF

The 1861 map (Map 2) illustrates that the portion of Lot 34 within/near to the study area was owned by John McNeil. No structures are illustrated within the study area.

No specific listing for anyone residing at Lot 34, Concession BF could be found in the 1871 Census.

The 1878 historical atlas indicates that William Wilson owned Lot 34 (Map 3). One structure is illustrated at the north-east corner of the lot just at the edge of the study area.

Lot 26, Concession 1

Henry Pearce is listed as the owner of Lot 26, Concession 1 in the 1861 map (Map 2). No structures are illustrated.

The 1871 Census listed Henry Pearce as the owner of 327 acres with his residency on Lot 26, Concession 1. Henry (age: 55) was born in England and married an Ontario woman named Fanny (45) and had the following children living with them in 1871: William (21), James (15), George (14), and Ira (9). Of the 327 acres owned by Henry Pearce, 250 of them were classed as improved: 100 in pasture and 4 in orchard/garden. Thirty acres planted in wheat that produced 270 bushels of grain. The farm also produced in bushels: barley (500), oats (400), peas (200), beans (3), corn (15), potatoes (100), turnips (200), grass/clover (30), and apples (30).

Henry Pearce remains listed as owner of Lot 26, Concession 1 in the 1878 historical atlas (Map 3) map. A structure is illustrated in the south-east corner of Lot 26, Concession 1.

Lot 27, Concession 1

The 1861 map illustrates that Lot 27 (Map 2) was divided into two unequal lots: the smaller southern portion within the study area owned by Henry Pearce; the larger northern portion (outside the study area) owned by James Rundle. A structure is illustrated in the north-east corner of Rundle's property as well as a spring identified centrally within the lot; both of these elements are outside the limits of the study area.

The 1871 Census listed James Rundle as the resident owner of 220 acres of Lot 27, Concession 1. James (age: 48) was born in England as was his wife Mary (42) and had the following Ontario-born children living with them in 1871: James (21), John (19), Thomas (16), William (14), [Lawc.] (11), Albert (8), Arthur (5), Francis (1). Of the 220 acres that are owned by James Rundle, 204 of them were classed as improved: 50 in pasture and 3 in orchard/garden. Forty acres planted in wheat produced 400 bushels of grain. The farm produced in bushels: barley (600), oats (300), peas (150), corn (100), potatoes (120), turnips (300[-]), beets (500), carrots/roots (200), grass/clover (20), apples (150), and pears/fruit (3).

The same division and ownership of Lot 27 is identified in the 1878 historical atlas (Map 3), although there is a structure illustrated in the south-west corner of Pearce's property as well as the previously noted structure in the north-east corner.

Lot 28, Concession 1

Lot 28 was divided into three unequal parcels in the 1861 map (Map 2): the larger southern portion within the study area owned by Levi Annis, the smallest middle portion by Richard Osborn, and the northern portion by James Rundle. A church is illustrated in the north-west corner of Rundle's property and possibly an associated

cemetery (marked with a cross); both of these elements are beyond the limits of the study area. The church is noted as Bible Christian.

The 1871 Census listed James Rundle (Sr.) as owner of 1 acre and Richard Grylls as tenant of 126 acres; both of whom are indicated as residing on Lot 28, Concession 1. James Rundle (age: 81) was born in England as was his wife Elizabeth (77) in their home they also had Mary Mason (40) and her children: Thomas George (15) and John (11). Mary was likely the Rundle's widowed daughter.

Richard (age: 50) was born in England as was his wife Margaret (45) and had the following Ontario-born children living with them in 1871: John (23) and Mary-Grace (11). They also had William Stacey living in their home, his relationship to the family was not indicated. Of the 126 acres that were rented by Richard Grylls, 110 of them were classed as improved: 13 in pasture and 5 in orchard/garden. Thirty acres planted in wheat produced 500 bushels of grain. The farm also produced, in bushels: barley (200), oats (250), peas (100), beans (3), potatoes (100), turnips (50), beets (300), carrots/roots (200), grass/clover (27), and apples (150).

The division of Lot 28 remains unchanged in the 1878 historical atlas (Map 3) although the southern portion was then owned by Charles A. Annis. The church and possible cemetery notations continue to be illustrated in the north-west corner of the lot however an additional was also illustrated in the same area.

Lot 29, Concession 1

The 1861 map (Map 2) illustrates that Lot 29 was divided into three unequal lots: the southern portion within the study area owned by John Pickle, the middle portion within the study area by William Annis, and the northern portion outside the study area by Christopher Courtice. No structures are illustrated within the study area on Lot 29.

The 1871 Census listed Levi Annis as owner of 150 acres and John Pickle as owner of 127 acres; both of whom resided on Lot 29, Concession 1. Levi Annis (age: 26) was born in Ontario as was his wife Charlotte (21). Of the 150 acres that were owned by Levi Annis, 115 of them were classed as improved: 15 in pasture and 2 in orchard/garden. Thirty-four acres planted in wheat produced 500 bushels of grain. The farm also produced in bushels: barley (200), oats (250), peas (150), potatoes (100), turnips (200), beets (100), carrots/roots (200), and apples (160). The Annis property also produced 400 pounds of maple sugar.

John (age: 56) was born in Ontario as was his wife Mary (44) and had the following Ontario-born children living with them in 1871: Oran (20), John (18), Thomas (16), Adeline (14), Sidney (12), Liderina (5), and Fanny (2). Of the 127 acres that were owned by John Pickle, all of them were classed as improved: 35 in pasture and 2 in orchard/garden. Forty acres planted in wheat produced 600 bushels of grain. The farm produced in bushels : barley (20), oats (200), peas (100), beans (2), corn (8), potatoes (100), turnips (100), beets (200), grass/clover (28), and apples (50).

The division of Lot 29 remains unchanged in the 1878 historical atlas although the central portion was then noted to be owned by L. Annis. A structure is noted on the eastern side of L. Annis' property.

Lot 30, Concession 1

The 1861 map illustrates that Lot 30 was divided into six unequal lots (Map 2). The north-east part of the lot was owned by Christopher Courtice and is outside the bounds of the study area. The remaining 5 land portions are part of the study area to varying degrees and in a clockwise order from the Courtice property the owners are as follows: William Annis, John Pickle, the Estate of Donald Cameron, John Sweet, James Adair, and Alexander

Trull. Two structures are illustrated within the study area on Lot 29: in the south-east corner of John Pickle's property and a schoolhouse (No. 4) in the south-west corner of John Sweet's property.

The 1871 Census listed James Adair as resident owner of 20 acres on Lot 30, Concession 1. James (age: 31) was born in Ireland and married an Ontario woman named Mercena (27) and had the following children living with them in 1871: James (10) and Lillie (8). Of the 20 acres that were owned by James Adair, 15 of them were classed as improved: 5 in pasture and 1/2 in orchard/garden. Eight acres planted in wheat produced 88 bushels of grain. The farm produced 100 bushels of barley and had 2 acres in hay crops.

The division of Lot 30 remains unchanged in the 1878 historical atlas (Map 3) although William Annis' parcel had transferred to L. Annis, the central portion, previously owned by the Estate of Donald Cameron, transferred to John Pickle, and the Trull property transferred a J.R. No additional structures were illustrated within the study area.

Lot 31, Concession 1

The 1861 map illustrates that Lot 31 was divided into two unequal parts: the smaller northern section owned by Robert Courtice (part of his farm Lilly Hill) and the larger southern portion owned by William Oke. One structure, located in the east side of the central portion, was illustrated on William Oke's property.

The 1871 Census listed Richard Oke as the resident owner of 83 acres on Lot 31, Concession 1. Richard (age: 24) was born in Ontario and like many in the community was noted to be Bible Christian and in occupation as a farmer. Of the 83 acres that are owned by Richard Oke, all of them were classed as improved: 12 in pasture and 1 in orchard/garden. Twenty-two acres planted in wheat produced 200 bushels of grain. The farm also produced in bushels: barley (400), oats (120), peas (80), potatoes (60), carrots/roots (100), grass/clover (18), and apples (100).

Robert Courtice's portion of the Lot 31 remained unchanged in the 1878 historical atlas (Map 3) although the southern portion has been subdivided: Richard Oke owned the southern part, Mrs. T.B. Oke the central part, and a very small part at the north end was occupied by a cheese factory. No additional structures were illustrated within the study area.

Lot 32, Concession 1

The 1861 map (Map 2) illustrates that Lot 32 was divided in three unequal portions: Jesse Trull owned the southern portion, William Stephens the centre, and Robert Courtice the northern portion. One structure was illustrated in the north-east section of the lot, part of Robert Courtice's Lilly Hill Farm but outside the limits of the study area.

The 1871 Census listed Robert Courtice as the resident owner of 145 acres on Lot 32, Concession 1. Robert (age: 61) was born in England as was his wife Susannah (46) and had the following Ontario-born children living with them in 1871: Robert (30), Jane (25), Elizabeth (21), and Fanny (18). Of the 145 acres that are owned by Robert Courtice, 120 of them were classed as improved: 25 in pasture and 1 in orchard/garden. Thirty acres planted in wheat produced 360 bushels of grain. The farm also produced in bushels: barley (300), oats (200), peas (250), potatoes (150), turnips (400), beets (200), grass/clover (13), apples (60), and pears/fruit (2). The Courtice property also produced 50 pounds of maple sugar.

The southern (Jesse Trull) and northern (Robert Courtice) ownership and divisions of the lot remained unchanged in the 1878 historical atlas. The central portion had, however, been further subdivided with William Stevens listed

on the western side and Robert Courtice Jr. identified on the eastern side. One additional structure was illustrated within the study area in 1878: a structure on Jesse Trull's property which was also illustrated within the Atlas and is presented as Image 28 of this report.

Lot 33, Concession 1

The 1861 map (Map 2) illustrates that Lot 33 was divided in three unequal portions: Alex Davidson owned the southern portion, William Stevens the centre, and Herri[ck] the northern portion. No structures were illustrated on Lot 33.

The 1871 Census listed William Stevens as resident, owner of 125 acres on Lot 33, Concession 1. William (age: 46) was born in Ontario as was his wife Eliza (40) and had the following child living with them in 1871: Ida (7). Ezra Hunter also lived in their home and his relationship to the family is noted as servant. Of the 125 acres that were owned by William Stevens, 100 of them were classed as improved: 40 in pasture and 1 in orchard/garden. Four acres planted in wheat produced 30 bushels of grain. The farm also produced in bushels: barley (200), oats (300), corn (100), potatoes (200), turnips (100), beets (100), and carrots/roots (200).

The property division remains unchanged in the 1878 historical atlas although J. Trull owned the southern portion and Thomas Worden the northern while William Stevens remained owner of the central section. The southern part of the lot had a structure in the south-east corner, the centre part of the lot had a structure in the north-west, and the northern part of the lot had a structure in the south-west just south of the bend in the road. All of the illustrated structures were south or west of Robinson creek.

Lot 34, Concession 1

The 1861 map illustrates that Lot 34 was divided into two parcels with Charles Wade identified in the south-west corner and Thomas Worden on the remainder of the lot (Map 2). One structure was illustrated in the north-east section of the lot at the bend in the road.

The 1871 Census listed Archibald McNeil as a tenant on 3 acres of Lot 34, Concession 1. Archibald (age: 39) was born in Scotland as was his wife Agnes (34) and had the following Ontario-born children living with them in 1871: Jane (12), James (11), Isabella (7), Donald (3), and Archibald (1). Of the 3 acres that were tenanted by Archibald McNeil, all were classed as improved: 2 in pasture and 1 in orchard/garden. The farm was noted to produce the 50 bushels of potatoes.

The 1871 Census also listed a Thomas Worden as the resident, owner of 200 acres on Lot 34, Concession 1. Thomas (age: 60) was born in England as was his wife Jane (57) and had the following Ontario-born children living with them in 1871: William (23) and Edwin (19). Of the 90 acres that were owned by Thomas Worden, all of them were classed as improved: 50 in pasture and 8 in orchard/garden. Thirty acres planted in wheat produced 240 bushels of grain. The farm produced in bushels: barley (500), oats (400), peas (200), corn (1), potatoes (600), carrots/roots (200), grass/clover (30), and apples (700).

The 1878 historical atlas indicates that Charles Wade owned the entire southern third of the lot while Thomas Worden continued to own the remainder. There remained only the one structure illustrated on the lot.

Lot 35, Concession 1

The 1861 map illustrates that the portion of Lot 35 within the study area was divided into four parcels: Robert Everson to the north, Thomas Worden to the centre-east, Thomas Wilson to the south-east, and Charles Wade to the west (Map 2). No structures were illustrated within the study area.

The 1871 Census listed a William Everson as a tenant on Lot 35, Concession 1 (described in Lot 35, Concession 2 below)

The 1871 Census listed Abel Grills as the tenant on 107 acres of Lot 35, Concession 1. Abel (age: 45) was born in England as was his wife Elizabeth (43). The family had the following children living with them in 1871: Richard (16), John (14), Susan (12), Grace (10), Regina (8), Thomas (6), Emily (4) and Jane (2). Of the 107 acres that were leased by Abel Grills, 50 were classed as improved: 20 in pasture and 1 in orchard/garden. Fourteen acres planted in wheat produced 150 bushels of grain. The farm also produced in bushels: barley (200), oats (100), peas (25), potatoes (300), turnips (60), and apples (50).

The 1871 Census also listed a Charles Wade as an owner of 90 acres of Lot 35, Concession 1. Charles (age: 51) was born in England as was his wife Charity (48) and had the following Ontario-born children living with them in 1871: John (19), Eliza (17), Ida (6). They also had John Gregg living in their home, his relationship to the family was noted as servant. Of the 90 acres that were owned by Charles Wade, all of them were classed as improved: 7 in pasture and 1 in orchard/garden. Fifty acres planted in wheat produced 800 bushels of grain. The farm also produced in bushels: barley (700), oats (200), peas (130), potatoes (200), and apples (100).

The lot divisions remained unchanged in the 1878 historical atlas (Map 3) although a W. Wilson is listed as owner of the south-east portion. One structure was illustrated on the west side Charles Wade's property and one structure was illustrated on W. Wilson's property in the south-east corner; both structures were just north of the railway line.

Lot 34, Concession 2

The 1861 map illustrates that the portion of Lot 34 within the study area was divided in two the eastern portion owned by Mrs. S. Penfound and the western by Charles White. No structures were illustrated within the study area.

The 1871 Census listed several tenants on Lot 34, Concession 2, none of the names correspond with noted landowners either within or outside the bounds of the study area. Tenant farmers on Lot 34 are as follows: George Skinner (64 acres) and John Adair (43 acres).

The lot divisions remained unchanged in the 1878 historical atlas although ownership had changes with John Penfound owner of the eastern side and Charles Wade the western side (Map 3). One structure was illustrated within the study area on Charles Wade's property.

Lot 35, Concession 2

Robert Everson is listed as the owner of the portion of Lot 35 within the study area in the 1861 map (Map 2). No structures were illustrated within the study area.

The 1871 Census listed several tenants and owners on Lot 35, Concession 2, including William Everson resided on Lot 35, Concession 1 but the 1861 and 1878 mapping indicate his 130-acre farm also included the southern portion of Lot 35, Concession 2. William (age: 27) and his wife Grace (27) were recorded as tenants on 130 acres, 80 of which had been improved although no further detail was provided.

The 1878 map indicates that the portion of Lot 35 within the study area was then owned by William Everson with one structure noted in the centre along the southern edge of the lot.

1.3 Archaeological Context

1.3.1 The Natural Environment

The study area is situated within the “Iroquois Plain” physiographic region; the Iroquois Plain is described by Chapman and Putnam (1984:190-196) as follows:

The lowland bordering Lake Ontario, when the last Glacier was receding but still occupied the St. Lawrence Valley, was inundated by a body of water known as Lake Iroquois which emptied eastward at Rome, New York State. Its old shorelines, including cliffs, bars, beaches, and boulder pavements are easily identifiable features.... The Iroquois plain extends around the western part of Lake Ontario, from the Niagara River to the Trent River..., its width varying from a few hundred meters to about eight miles.

The soils of the study area consist predominately of Darlington loam; description of all mapped soil types within the study area is provided in Table 2 (Olding *et al.* 1956, Map 4). Overall the Darlington loam and nearby soil types likely would have been suitable for Indigenous agricultural practices. The closest potable water sources are various tributaries of the Robinson Creek and Tooley Creek Watersheds that intersect the study area as well as Lake Ontario which is approximately 690 metres to the south (Map 1).

Table 2: Soil Types of Study Area

Map Code	Soil Type	Texture	Topography	Drainage
B.L.	Bottom Land	-	Level	Poor – Subject to Flooding
Dal	Darlington	Loam	Undulating – Slightly Rolling	Fair – Good
Dasl	Darlington	Sandy Loam	Nearly Level – Gently Undulating	Good
Dsl	Dundonald	Sandy Loam	Nearly Level – Gently Undulating	Good
Ncl	Newcastle	Clay Loam	Undulating – Slightly Rolling	Fair – Good
Tsl	Tecumseth	Sandy Loam	Nearly Level	Poor

1.3.2 Previously Identified Archaeological Sites and Surveys

A search of the MHSTCI database has revealed that there are 60 archaeological sites that have been identified within a 1 km radius of the study area (Table 3), with approximately 21 archaeological assessments located within 50 m of the study area (Table 4).

Table 3: Archaeological Sites Registered within 1km of Study Area

Borden	Site Name	Time Period	Affinity/Site Type
AIGq-17	Osbourne	Pre-Contact (Archaic)	Indigenous
AIGq-18	Robertson	Pre-Contact (Woodland)	Indigenous
AIGq-19	Schlact	Pre-Contact (Late Archaic)	Indigenous

Borden	Site Name	Time Period	Affinity/Site Type
AIGq-22	Elgin Farwell	Pre-Contact (Archaic)	Indigenous
AIGq-26	Sam Brown	-	-
AIGq-30	Bickell	-	-
AIGq-31	Courtice	-	-
AIGq-32	Penfound	-	-
AIGq-39	Robinson	Pre-Contact (Archaic)	Indigenous
AIGq-59	Robinson Hollow	Pre-Contact (Late Woodland - Iroquoian)	Indigenous findspot
AIGq-60	Robinson Ridge	Pre-Contact (Middle - Late Woodland)	Indigenous
AIGq-62	-	Pre-Contact (Late Archaic)	Indigenous findspot
AIGq-63	Sid Worden	Pre-Contact	Indigenous scatter
AIGq-64	Huntington	Pre-Contact (Early Archaic)	Indigenous findspot
AIGq-68	Robishow (H2)	Post-Contact	Euro-Canadian, homestead
AIGq-69	Osborne	Post-Contact	Euro-Canadian, homestead
AIGq-71	P2	Pre-Contact	Indigenous findspot
AIGq-73*	Clarington I	Pre-Contact (Early Woodland)	Indigenous campsite
AIGq-74*	Clarington II - Camp 30 H1	Pre-Contact (Early Woodland); Post-Contact	Indigenous campsite; Euro- Canadian, homestead
AIGq-96	Casey Trull (East H6)	Post-Contact	Euro-Canadian, homestead, midden
AIGq-100	Location 1	Post-Contact	Euro-Canadian, homestead
AIGq-101	Location 2	Post-Contact	Euro-Canadian, homestead
AIGq-102	Location 4	Post-Contact	Euro-Canadian, homestead
AIGq-106	East P13	Pre-Contact	Indigenous findspot

Borden	Site Name	Time Period	Affinity/Site Type
AIGq-115	-	Post-Contact	Euro-Canadian, homestead
AIGq-116	H2	Post-Contact	Euro-Canadian, homestead
AIGq-117	H3	Post-Contact	Euro-Canadian, homestead
AIGq-118	H4	Post-Contact	Euro-Canadian, homestead
AIGq-119	P2	Pre-Contact (Middle Archaic)	Indigenous
AIGq-121*	J.Ruddle site	Post-Contact	Euro-Canadian, homestead
AIGq-123	Rotting Apple	Post-Contact	Euro-Canadian, UEL, cabin
AIGq-125*	S McClellan	Pre-Contact; Post-Contact	Other
AIGq-126*	GTR	Post-Contact	Euro-Canadian, work camp (Grand Trunk Railway)
AIGq-129*	-	Post-Contact	Euro-Canadian
AIGq-135	AIGq-135 - E P18-P19	Pre-Contact	Indigenous campsite
AIGq-137	AIGq-137 - E P20	-	-
AIGq-153*	AIGq-153	Pre-Contact (Early - Late Archaic)	Indigenous
AIGq-157	AIGq-157 East H27-P	Post-Contact	Euro-Canadian, homestead
AIGq-164*	McClellan Cabin	Pre-Contact; Post-Contact	Indigenous campsite; Euro-Canadian, homestead
AIGq-165	Smith's Flakes	Pre-Contact	Indigenous scatter
AIGq-180	-	Pre-Contact (Archaic)	Indigenous
AIGq-181	-	Pre-Contact (Archaic)	Indigenous
AIGq-182	-	Pre-Contact	Indigenous
AIGq-183	-	Pre-Contact	Indigenous
AIGq-184	-	Pre-Contact	Indigenous
AIGq-185	-	Pre-Contact	Indigenous scatter

Borden	Site Name	Time Period	Affinity/Site Type
AIQq-186	-	Pre-Contact	Indigenous
AIQq-187	-	Pre-Contact	Indigenous
AIQq-188	-	Pre-Contact	Indigenous scatter
NDFS-0074	-	Pre-Contact	Indigenous
NDFS-0075	-	Pre-Contact	Indigenous
NDFS-0076	-	Pre-Contact	Indigenous
NDFS-0077	-	Pre-Contact	Indigenous
NDFS-0078	-	Pre-Contact	Indigenous
NDFS-0079	-	Pre-Contact	Indigenous
NDFS-0080	-	Pre-Contact	Indigenous
NDFS-0081	-	Pre-Contact	Indigenous
NDFS-0082	-	Pre-Contact	Indigenous
NDFS-0083	-	Pre-Contact	Indigenous
NDFS-0084	-	Pre-Contact	Indigenous

*The archaeological sites indicated are present within the current study area and described in Table 4 below.

Table 4: Previous Archaeological Assessments within 50 metres of the Study Area

Stage	Lot, Concession	Description	Further CHVI	Reference
1-2	Lots 26 – 35 Concession BF Lots 26 – 35 Concession 1	<p>Stage 1 assessment was conducted by ASI as a component of the 407 East EA and found several areas to retain archaeological potential and require Stage 2 assessment.</p> <p>Stage 2 assessment was conducted by Ground Truth for several parcels related to the 407 East Expansion. The following sites within the South Courtice study area were recommended for</p>	-	<p>ASI 2008 (P163-0022-2007)</p> <p>Ground Truth Archaeology 2012 (P206-0057-2011)</p>

Stage	Lot, Concession	Description	Further CHVI	Reference
		<p>Stage 3 assessment: AIGq-121, AIGq-123, AIGq-125, AIGq-126, AIGq-129.</p> <p>Stage 2 assessment was conducted by ASI in 2012 and 2013 for several parcels related to the 407 East Expansion. No additional sites within the South Courtice study area were recommended for Stage 3 assessment.</p>		<p>ASI 2014 (P094-0162-2012) ASI 2015 (P046-0068-2013)</p>
1	<p>Lots 26 – 29 Concession BF Lots 26 – 35 Concession 1</p>	<p>Stage 1 assessment was conducted by URS prior to improvements made to Highway 401 (Courtice Road – East Townline Road). Sections of the study area beyond the ROW were found to retain archaeological potential and recommended for Stage 2 assessment</p>	-	<p>URS 2013 (P123-0071-2012)</p>
1-2	<p>Lots 31 – 35</p>	<p>Stage 2 assessment by test pit survey in 2005 along Highway 401 Road-Right-of-Way. No archaeological resources recovered.</p>	-	<p>AMA 2006 (P035-0014-2005)</p>
1-2	<p>Lot 23 and 24 Concession BF</p>	<p>Stage 2 assessment by pedestrian and test pit survey in August 2017. No archaeological resources identified.</p>	None	<p>Archeoworks Inc. 2017 (P029-0916-2017)</p>
1-2	<p>Lot 26 Concession BF</p>	<p>Stage 2 assessment by pedestrian survey in November 2007. One pre-contact Indigenous piece of chipping detritus (Findspot P1). No further assessment recommended.</p>	None	<p>ASI 2007 (P049-0232-2007)</p>
1-3	<p>Lot 27 Concession 1</p>	<p>Stage 2 assessment by pedestrian and test pit survey in April 2005. No artifacts were recovered during test pit survey. During pedestrian survey 2 pre-contact Indigenous findspots were located and recommended for Stage 3: AIGq-73 and AIGq-74. An additional unregistered findspot was also located but had insufficient artifacts to recommend further assessment.</p> <p>Stage 3 assessment of both locations was completed in May 2005. A total of 6 test units were excavated at AIGq-73 and the combined Stage 2-3 artifact count was</p>	None	<p>Archeoworks Inc. 2005 (P029-170, P029-177, P029-178)</p>

Stage	Lot, Concession	Description	Further CHVI	Reference
		<p>11, including 8 pieces of Onondaga chipping detritus and 3 biface fragments.</p> <p>A total of 7 test units were excavated at AIGq-74 and the combined Stage 2-3 artifact count was 12 pieces of Onondaga chipping detritus.</p> <p>*A designated woodlot (17acres) was not assessed due to the intention to preserve.</p>		
3	Lot 28 Concession BF	<p>Stage 3 excavation of the Euro-Canadian site AIGq-126. Originally identified by Ground Truth during Stage 2 the site is interpreted as a worker's camp/kitchen for the Grand Trunk Railway. Stage 3 test unit excavation was completed in September 2012. A total of 20 test units were excavated with 566 historical Euro-Canadian artifacts recovered. No cultural features were identified.</p> <p>Stage 4 report not available.</p>	None	ASI 2013 (P223-0058-2012)
1-2	Lot 28 and 29 Concession BF	<p>Stage 2 assessment by test pit survey in October 2018. No archaeological resources identified.</p>	None	Scarlett Janusas Archaeology Inc. 2018 (P027-0362-2018)
1-2	Lot 29 and 30 Concession 1	<p>Stage 2 assessment in support of future Courtice Road GO Station. Completed by pedestrian and test pit survey in the fall of 2009. No archaeological resources identified.</p>	None	Timmins Martelle 2010 (P064-313-2009)
1-2	Lot 33 Concession 1	<p>A Stage 1-2 heritage assessment of Stephens-Hall Cemetery.</p> <p>Despite mechanical topsoil removal in the area identified as the potential location of the Stephens-Hall gravesite no grave shafts, coffin wood, nor human remains were identified.</p> <p>The Cemeteries Registrar cleared necessary grading and development.</p>	None	Northeastern Archaeological Associates 2003 (2002-049-001-S4EE)
1-3	Lot 33 Concession 1	<p>Stage 2 assessment by pedestrian and test pit survey in November 2011. One historical Euro-Canadian scatter of artifacts was identified (AIGq-129).</p>	None	Northeastern Archaeological Associates 2012 (P025-234-2011)

Stage	Lot, Concession	Description	Further CHVI	Reference
		Stage 3 assessment was conducted in April 2012 with a CSP and excavation of 36 test units. A total of 1,542 artifacts were recovered (including one pre-contact indigenous flake). No cultural features were identified.		Northeastern Archaeological Associates 2014 (P025-241-2012)
1-2	Lot 34 Concession 1	Stage 2 assessment by pedestrian and test pit survey in June and October 2017. No archaeological resources identified.	None	Archaeological Assessments Ltd. 2017 (P013-1174-2016)
1-2	Lot 34 – 35 Concession 1	Stage 2 assessment by test pit survey in May 2016. No archaeological resources identified.	None	YNAS 2016 (P156-0252-2016)
1	Lot 31 – 35 Concession BF Lot 35 Concession 1	Stage 1 assessment of Darlington Provincial Park found portions of the study area to exhibit archaeological potential and recommend Stage 2 assessment prior to development/disturbance. The Burk Pioneer Cemetery (Site No. 00403) is registered with the Province and is recommended for Stage 3 cemetery investigation. A shipwreck is registered within 130 metres of the Park boundary; recommendation to consult with MHSTCI prior to off-shore development/disturbance.	Yes	Past Recovery 2016 (P336-0099-2015)
1-2	Lot 33 Concession 2	Stage 2 assessment by pedestrian and test pit survey in May and June 2017. No archaeological resources identified.	None	YNAS 2017 (P156-0264-2017)
1-3	Lot 33 and 34 Concession 1	Stage 1 – 3 archaeological assessment of the Westvale property. Stage 2 pedestrian survey identified two pre-contact Indigenous archaeological locations: AIGq-62 and AIGq-63. AIGq-62 was an isolated 'Small Point Archaic' projectile point and as such no further assessment was recommended. AIGq-63 was subject to Stage 3 excavation. A total of 27 test units were excavated but the combined total artifact count for the site was only four pieces of chipping detritus and three utilized	None	Advance Archaeology 2001a (2000-018-024-STG3)

Stage	Lot, Concession	Description	Further CHVI	Reference
		flakes. No further assessment was recommended.		
1-2	Lot 33 and 34 Concession 2	Stage 1 – 2 archaeological assessment of the Huntington property by combination of test pit and pedestrian survey. An isolated corner-notched projectile point was recovered during Stage 2 pedestrian survey (AIGq-64), no further artifacts were identified. No further assessment recommended	None	Advance Archaeology 2001b (2000-018-027)
1-4	Lot 35 Concession 1	<p>Stage 1 – 2 archaeological assessment of the Robinson Ridge Subdivision was completed by a combination of pedestrian and test pit survey.</p> <p>Two pre-contact Indigenous sites were identified during test pit survey: AIGq-59 and AIGq-60. An additional three artifacts associated with AIGq-60 were recovered during pedestrian survey.</p> <p>AIGq-59 was subject to Stage 3 excavation of six test units, it was determined to not be an area of significant occupation and no further assessment was recommended.</p> <p>AIGq-60 was subject to Stage 3 excavation of 20 test units which recovered pre-contact lithic and ceramic artifacts as well as subsurface cultural features that indicated the site dated to approximately 1200 – 1300 CE.</p> <p>Stage 4 mitigation of AIGq-60 was completed in 2001 through a combination of block excavation and mechanical topsoil removal. AIGq-60 is identified as a Pickering-phase Early Ontario Iroquois site (1256 CE radiocarbon date). A total of 6,783 artifacts were recovered during Stage 4, primary ceramics (5,567) as well as faunal (682), lithic (501), and botanical (33) material.</p> <p>A total of 351 subsurface features were identified; 46 of which produced cultural material. One of</p>	None	<p>Advance Archaeology 1997 (97-03-LIC-1997-055)</p> <p>Advance Archaeology 2003 (2000-018-021)</p>

Stage	Lot, Concession	Description	Further CHVI	Reference
		<p>the features contained the fragmentary and incomplete human remains of an adult male (aged 40-50) which were set to be returned to Scugog First Nation for reburial.</p> <p>Although Stage 4 mitigation within the study area was completed with no further assessment required, the surrounding properties should be considered to have high archaeological potential.</p>		

DRAFT

2.0 FIELD METHODS

2.1 Existing Conditions

The CEL includes approximately 400 hectares of land and is largely undeveloped. The primary land use includes agricultural practice, industrial business (particularly along Baseline Road), and rural residential. Two known cemeteries are present within the CEL and are demarcated on Map 6.

The SWC includes approximately 150 hectares, of which two thirds have already been developed with residential neighbourhoods and the South Courtice Arena and surrounding playing fields. Within the residential development a few larger lots remain intact; in particular the homes at 1440 Gord Vinson Avenue (Lot 35, Concession 2) and 1467 Prestonvale Road (Image 6, Lot 33, Concession 1) are likely structures that are noted on the 1878 map (Map 3). The south portion of the area is in use as arable agricultural land as well as the Prestonvale Tree Farms.

The visible impact of development and ground disturbance is noted in Map 5 where aerial images of the study area from 1954, 2000, and 2010 illustrate the change in land use over time.

2.2 Field Survey Methods

Although a property inspection is not a mandatory component of Stage 1 investigations, a random spot-check methodology was employed to provide relevant photos and impression within the Study Area (MHSTCI 2011 Section 1.2, Standard 1). The Stage 1 property inspection of the study area was conducted on 17 May 2019, under archaeological consulting licence P327, issued to Dr. Henry Cary of Golder. Henry designated Sarah News (R485) to conduct the property survey of the study area. Sarah News was delegated the responsibility of undertaking the archaeological fieldwork at the study area as per Section 12 of the MHSTCI 2013 *Terms and Conditions for Archaeological Licences*, issued in accordance with clause 48(4)(d) of the *Ontario Heritage Act*

The weather during the property inspection was overcast and cool. Lighting conditions were excellent, and at no time were field conditions found to be detrimental to the identification of archaeological resources or landscapes. The property inspection of the study area was conducted on foot from the publicly accessible road-right-of-way (ROW) coverage of the study area was considered to be good (Map 6, Images 1-27).

Table 5 provides an inventory of the documentary record generated in the field.

Table 5: Inventory of Documentary Record

Document Type	Current Location of Document	Additional Comments
Field Notes	Golder office in Whitby	2 pages stored to Golder server
Hand Drawn Maps	Golder office in Whitby	1 hand drawn map and stored to Golder server
Maps Provided by Client	Golder office in Whitby	1 map stored to Golder server
Digital Photographs	Golder office in Whitby	228 photographs stored to Golder server

3.0 ANALYSIS AND CONCLUSIONS

3.1 Assessing Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. In accordance with the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* the following are features or characteristics that indicate archaeological potential:

- Previously identified archaeological sites;
- Water sources:
 - Primary water sources (lakes, rivers, streams, creeks);
 - Secondary water sources (intermittent streams and creeks; springs; marshes; swamps);
 - Features indicating past water sources (e.g. glacial lake shorelines indicated by the presence of raised gravel, sand, or beach ridges; relic river or stream channels indicated by clear dip or swale in the topography; shorelines of drained lakes or marshes; and cobble beaches);
 - Accessible or inaccessible shoreline (e.g. high bluffs, swamps or marsh fields by the edge of a lake; sandbars stretching into marsh);
- Elevated topography (eskers, drumlins, large knolls, plateaux);
- Pockets of well drained sandy soil, especially near areas of heavy soil or rocky ground; Distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases (there may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings);
- Resource areas including:
 - Food or medicinal plants;
 - Scarce raw minerals (e.g. quartz, copper, ochre or outcrops of chert);
 - Early Euro-Canadian industry (fur trade, mining, logging);
- Areas of Euro-Canadian settlement; and,
- Early historical transportation routes.

In recommending a Stage 2 property survey based on determining archaeological potential for a study area, MHSTCI stipulates the following:

- No areas within 300 metres of a previously identified site; water sources; areas of early Euro-Canadian Settlement; or locations identified through local knowledge or informants can be recommended for exemption from further assessment;
- No areas within 100 metres of early transportation routes can be recommended for exemption from further assessment; and,
- No areas within the property containing an elevated topography; pockets of well-drained sandy soil; distinctive land formations; or resource areas can be recommended for exemption from further assessment.

3.1.1 Archaeological Integrity

A negative indicator of archaeological potential is extensive land disturbance. This includes widespread earth movement activities that would have eradicated or relocated any cultural material to such a degree that the information potential and cultural heritage value or interest has been lost.

Section 1.3.2 of the MHSTCI' 2011 Standards and Guidelines for Consultant Archaeologists states that:

Archaeological potential can be determined not to be present for either the entire property or a part(s) of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources.

MHSTCI 2011:18

The types of disturbance referred to above includes, but is not restricted to, quarrying, sewage and infrastructure development, building footprints and major landscaping involving grading below topsoil.

This level of disturbance is noted throughout the study area where infrastructure development (including arterial roads, sewers, highways, and railway lines) as well as residential and industrial development footprints have resulted in the occurrence of extensive grading and ground disturbance (Map 5 and Map 6).

3.1.2 Potential for Pre-contact and Historical Indigenous Archaeological Resources

Following the criteria outlined above in Section 3.1 to determine pre-contact and historic Indigenous archaeological potential, a number of factors can be highlighted. The soils of the study area would have been suitable for pre-contact Indigenous practices. There are several water sources that intersect the study area as well as Lake Ontario to the south. Approximately 40 pre-contact Indigenous archaeological sites have been registered within 1km of the study area as well as several within 50 m of the study area; particularly AIGq-60 which was located within the study area and may continue into previously unassessed land.

When the above noted archaeological potential criteria were applied to the study area, the study area exhibits archaeological potential for pre-contact and post-contact Indigenous sites. However, areas of previous disturbance eradicate the potential for the recovery of archaeological resources (Section 3.1.1) Map 6 illustrates the results of the Stage 1 archaeological assessment.

3.1.3 Potential for Historical Euro-Canadian Archaeological Resources

Following the criteria outlined above in Section 3.1 to determine Euro-Canadian archaeological potential, a number of factors can be highlighted including the development of early roadways, railways, and occupation of the surrounding area from the early 19th century as evidenced by historical mapping and land records. Approximately 17 Euro-Canadian archaeological sites have been registered within 1km of the study area.

When the above noted archaeological potential criteria were applied to the study area, the study area exhibits archaeological potential for historical Euro-Canadian sites. However, areas of previous disturbance eradicate the potential for the recovery of archaeological resources (Section 3.1.1), Map 6 illustrates the results of the Stage 1 archaeological assessment.

4.0 RECOMMENDATIONS

Given the findings of the Stage 1 archaeological assessment of the Study Area, as illustrated in Map 6, the following recommendations are made:

- 1) Portions of the Study Area that were identified as previously disturbed, are considered to exhibit low archaeological potential and no further assessment is recommended.
- 2) Lands encompassed within the Study Area limits which have been previously subjected to archaeological assessment(s) and cleared by the MHSTCI of further archaeological concern are recommended to be exempt from further assessment.
- 3) The known cemeteries/burial grounds within the Study Area exhibit archaeological potential; it is recommended that these areas be subject to Stage 2 archaeological assessment in consultation with the MHSTCI and BAO prior to ground disturbance associated with any future development; the area of archaeological potential illustrated on Map 6 includes a 10-metre protective buffer.
- 4) Those portions of the Study Area that exhibit archaeological potential for both Indigenous and historical Euro-Canadian archaeological resources; are recommended to be subject to a Stage 2 archaeological assessment prior to any planned development or ground impacts. It is recommended that areas of archaeological potential be subjected to test pit or pedestrian survey at 5 m intervals in accordance with Sections 2.1.1 and 2.1.2 of the *Standards and Guidelines for Consultant Archaeologist* (MHSTCI 2011).

No archaeological assessment can necessarily account for all potential archaeological resources. Should deeply buried archaeological resources be identified during ground disturbance activity associated with future development of the study area, ground disturbance activities should be immediately halted and the Archaeological Division of the MHSTCI notified.

The MHSTCI is asked to review the results presented and to accept this report into the Provincial Register of Archaeological Reports. The MHSTCI is asked to issue a letter concurring with the results presented herein

5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Heritage, Sport, Tourism, and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c O.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism, and Culture Industries, a letter will be issued by the Ministry stating that there are no further concerns with regards to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licenced archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licenced archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be representative of a new archaeological site or sites and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.

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7.0 IMAGES



Image 1: Residential intersection (Townline and Pickard Gate), previous disturbance due to residential development and road infrastructure, (Lot 35, Concession 1), view north-west



Image 2: Edge of residential development, previous assessment completed, (Lot 34, Concession 1), view south



Image 3: Agricultural field and rural residential home, (Lot 35, Concession 1), view north-west



Image 4: Agricultural field, (Lot 35, Concession 1), view east



Image 5: Grassland and scrub trees north of railway line, (Lot 35, Concession 1), view east



Image 6: Rural residential home Prestonvale Road and manicured lawn, disturbance along grave driveway and ROW culvert, (Lot 33, Concession 1), view east



Image 7: Rural residential home and manicured lawn on Prestonvale Road, disturbance along driveway and ROW culvert, (Lot 33, Concession 1), view east

Image 8: Agricultural tree plantation, (Lot 33, Concession 1), view east from Prestonvale Road



Image 8: Agricultural tree plantation, (Lot 33, Concession 1), view east from Prestonvale Road



Image 9: Agricultural land, (Lot 34, Concession 1), view west from Prestonvale Road



Image 10: Agricultural land, (Lot 34, Concession 1), view west from Prestonvale Road



Image 11: Agricultural land, (Lot 33, Concession 1), view east from Prestonvale Road



Image 12: Gates to St. Wolodymyr and St. Olha Ukrainian cemetery property, (Lot 34, Concession 1), view west



Image 13: Agricultural land, disturbance of auto-parts yard visible in background, (Lot 33, Concession 1), view east



Image 14: Self storage units, disturbance due to development, infrastructure, and man-made shaping of ROW boulevard, (Baseline Road West), (Lot 31, Concession 1), view north-east



Image 15: Agricultural land, (Lot 30, Concession 1) view east from Trulls Road



Image 16: Agricultural land and rural residential home and farm buildings, (Lot 31, Concession 1), view north-west



Image 17: Agricultural land and rural residential home and farm buildings, (Lot 31, Concession 1), view west



Image 18: Agricultural land, (Lot 31, Concession 1), view west from Trulls Road



Image 19: Agricultural land, (Lot 30, Concession 1), view east from Trulls Road



Image 20: Agricultural land, (Lot 29, Concession 1) view west from Courtice Road



Image 21: Agricultural land, (Lot 29, Concession 1), view west from Courtice Road



Image 22: Development and disturbance for commuter infrastructure, (Lot 29, Concession 1), view south-east



Image 23: Agricultural meadowland, forest in background, (Lot 28, Concession 1), view north



Image 24: Forested meadowland, (Lot 27 and 28, Concession 1), view north



Image 25: Disturbance due to industrial development, infrastructure, man-made shaping of ROW boulevard and ditch, (Lot 27, Concession 1), view north



Image 26: Disturbance due to industrial development, infrastructure, (Lot 27, Broken Front Concession), view east



Image 27: Disturbance due to industrial development, infrastructure, (Lot 28, Broken Front Concession), view south south-east

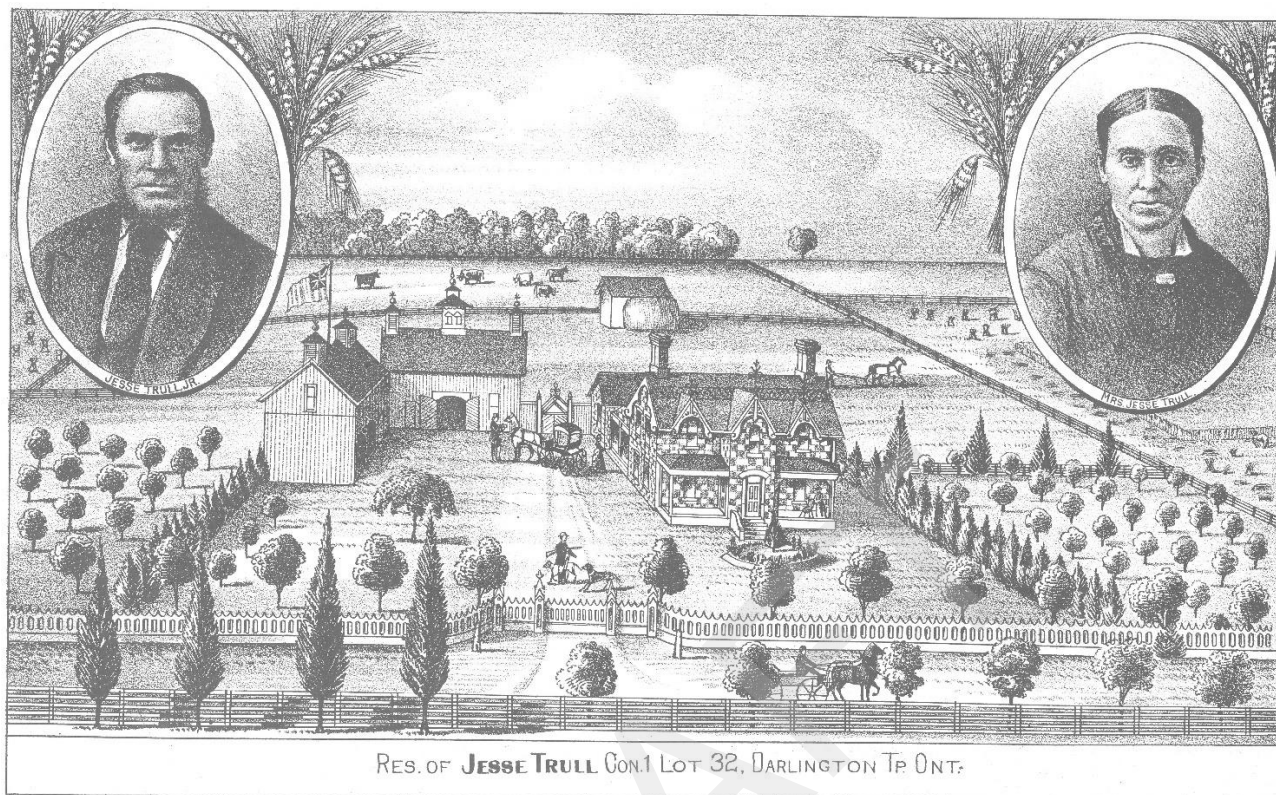
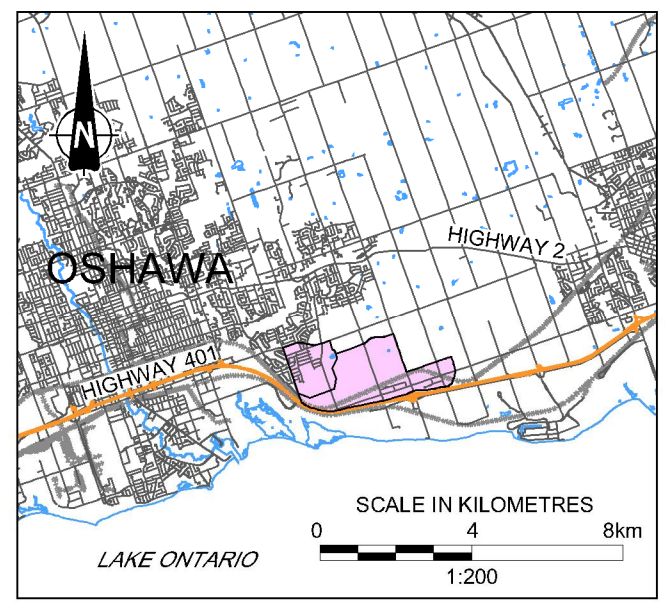
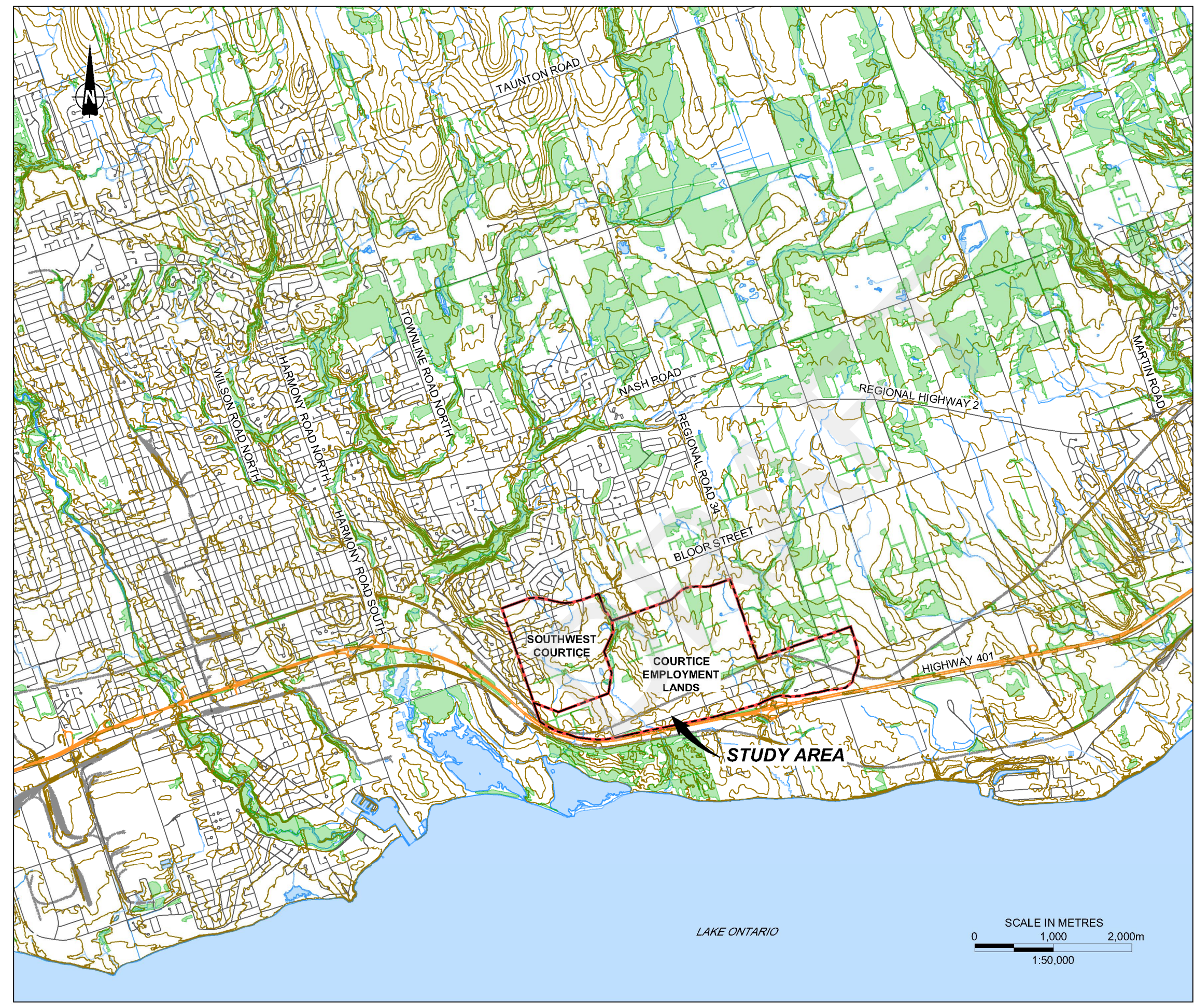


Image 28: 1878 County Atlas illustration of home within study area, Lot 32, Concession 1, Jesse Trull's property.

8.0 MAPS

All maps will follow on subsequent pages.



KEY PLAN

LEGEND

— APPROXIMATE LOCATION OF STUDY AREA

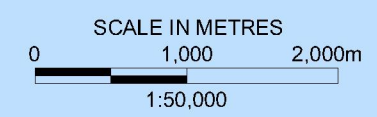
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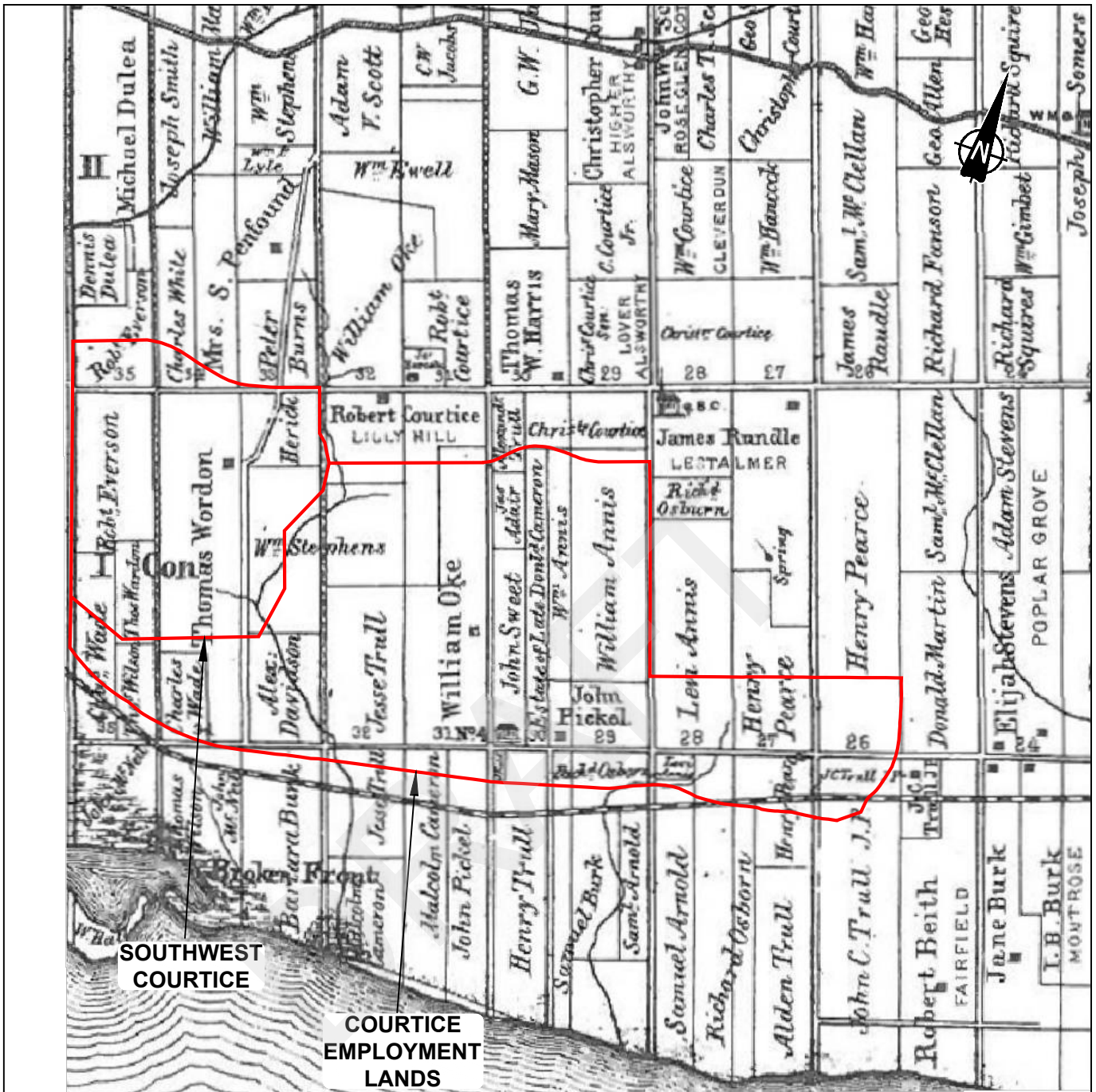
NOTES

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ
IN CONJUNCTION WITH ACCOMPANYING TEXT.
ALL LOCATIONS ARE APPROXIMATE.

PROJECT		STAGE 1 ARCHAEOLOGICAL ASSESSMENT COURTYCE EMPLOYMENT LANDS AND SOUTHWEST COURTYCE SECONDARY PLAN AREAS MUNICIPALITY OF CLARINGTON, DURHAM COUNTY, ONTARIO	
TITLE		LOCATION OF STUDY AREA	
PROJECT No.	18109797	FILE No.	18109797-R01001
CADD	ZJB	SCALE	AS SHOWN
CHECK		REV.	
	Nov 18/19	MAP 1	



LAKE ONTARIO



LEGEND

— APPROXIMATE LOCATION OF STUDY AREA

REFERENCE

TREMAINE GEORGE R., 1861, TREMAINE'S MAP OF THE COUNTY OF DURHAM. GEORGE C. TREMAINE., TORONTO.

NOTES

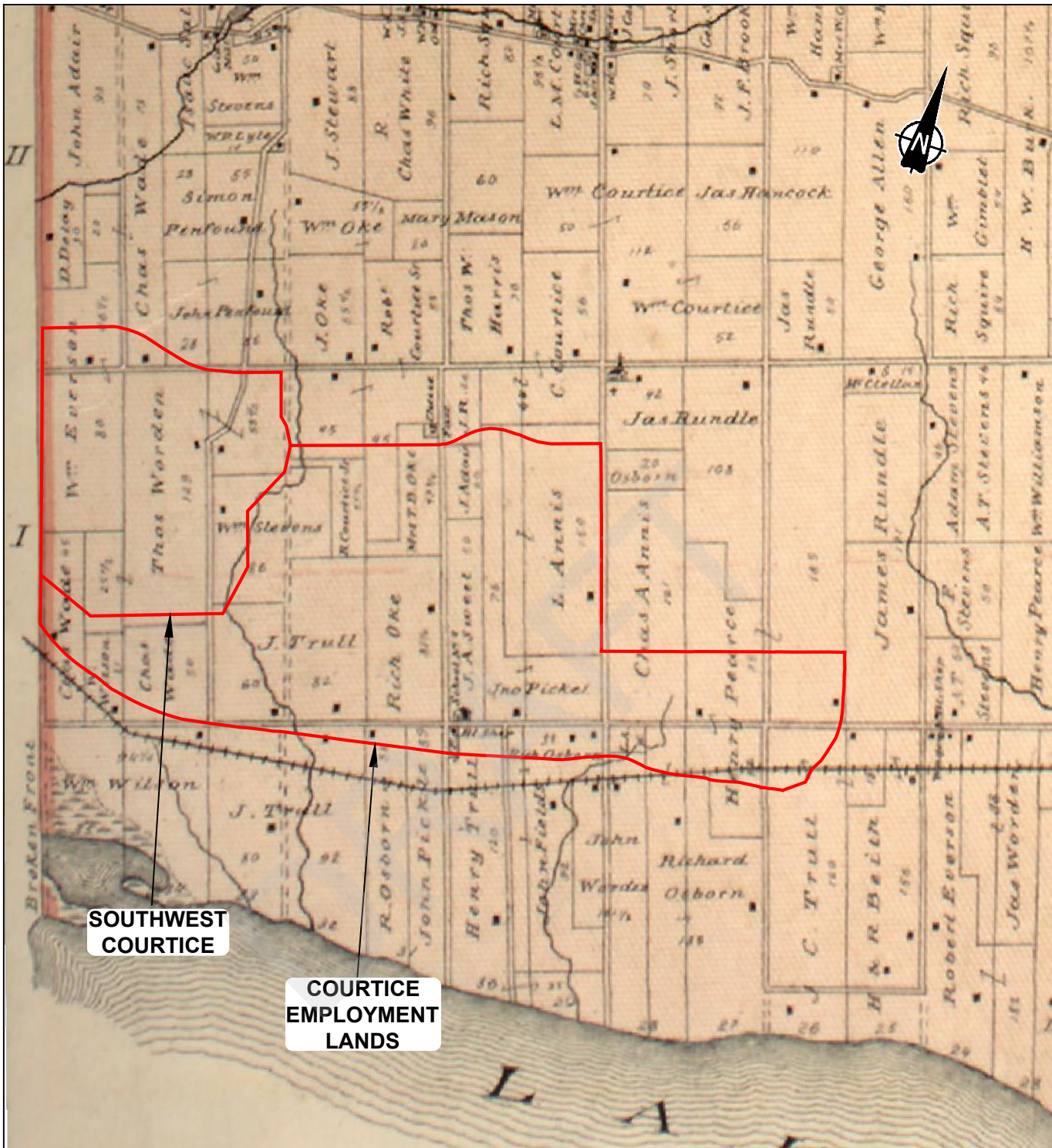
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ALL LOCATIONS ARE APPROXIMATE ONLY.

PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT
COURTYCE EMPLOYMENT LANDS AND
SOUTHEAST COURTYCE SECONDARY PLAN AREAS
MUNICIPALITY OF CLARINGTON, DURHAM COUNTY, ONTARIO

TITLE **A PORTION OF TREMAINE'S 1861
MAP OF DURHAM COUNTY**

PROJECT No.		18109797		FILE No.		18109797-R01002	
CADD		ZJB/DCH		SCALE		N.T.S. REV.	
CHECK		Nov 19/19		MAP 2			
GOLDER							



LEGEND

— APPROXIMATE LOCATION OF STUDY AREA

REFERENCE

BELDEN AND CO., 1878, ILLUSTRATED HISTORICAL ATLAS OF THE COUNTIES OF NORTHUMBERLAND AND DURHAM, ONTARIO.

NOTES

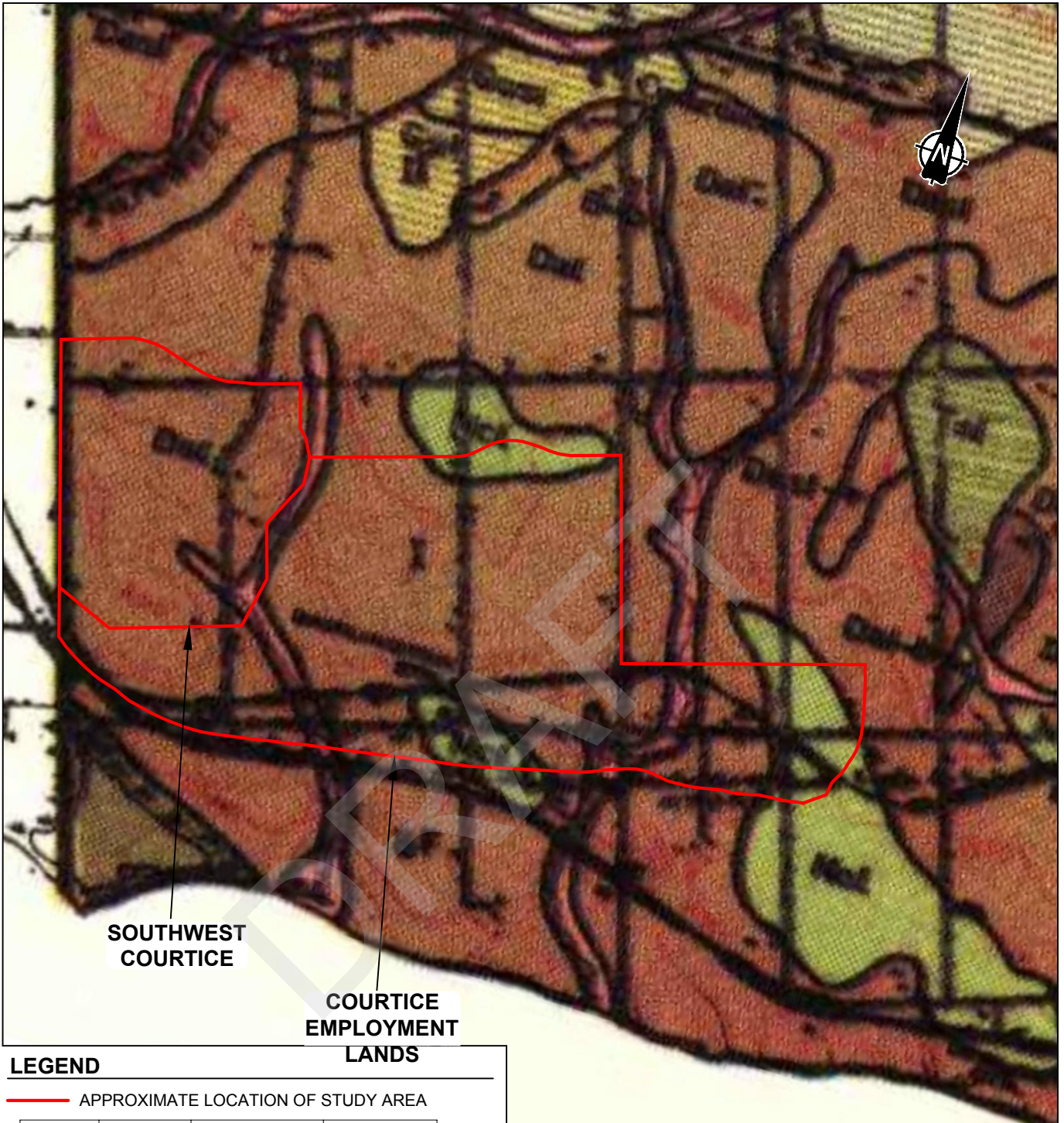
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ALL LOCATIONS ARE APPROXIMATE ONLY.

PROJECT STAGE 1 ARCHAEOLOGICAL ASSESSMENT
COURTICE EMPLOYMENT LANDS AND
SOUTHEAST COURTICE SECONDARY PLAN AREAS
MUNICIPALITY OF CLARINGTON, DURHAM COUNTY, ONTARIO

TITLE **A PORTION OF 1878 COUNTY ATLAS OF
NORTHUMBERLAND AND DURHAM COUNTY**

PROJECT No.		18109797		FILE No.		18109797-R01002	
CADD		ZJB/DCH		Nov 18/19		SCALE	
CHECK						N.T.S. REV.	
						<p>MAP 3</p>	



LEGEND

— APPROXIMATE LOCATION OF STUDY AREA

Colour	Map Code	Soil Type	Texture
	B.L.	Bottom Land	-
	Dal	Darlington	Loam
	Dasl	Darlington	Sandy Loam
	Dsl	Dundonald	Sandy Loam
	Ncl	Newcastle	Clay Loam
	Tsl	Tecumseth	Sandy Loam

REFERENCE

WEBBER LR AND MORWICK FF, 1946, SOIL SURVEY OF DURHAM COUNTY. REPORT NO. 9 OF THE ONTARIO SOIL SURVEY. EXPERIMENTAL FARMS SERVICE, DOMINION DEPARTMENT OF AGRICULTURE, AND THE ONTARIO AGRICULTURAL COLLEGE.

NOTES

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ALL LOCATIONS ARE APPROXIMATE ONLY.

PROJECT	STAGE 1 ARCHAEOLOGICAL ASSESSMENT COURTICE EMPLOYMENT LANDS AND SOUTHWEST COURTICE SECONDARY PLAN AREAS MUNICIPALITY OF CLARINGTON, DURHAM COUNTY, ONTARIO
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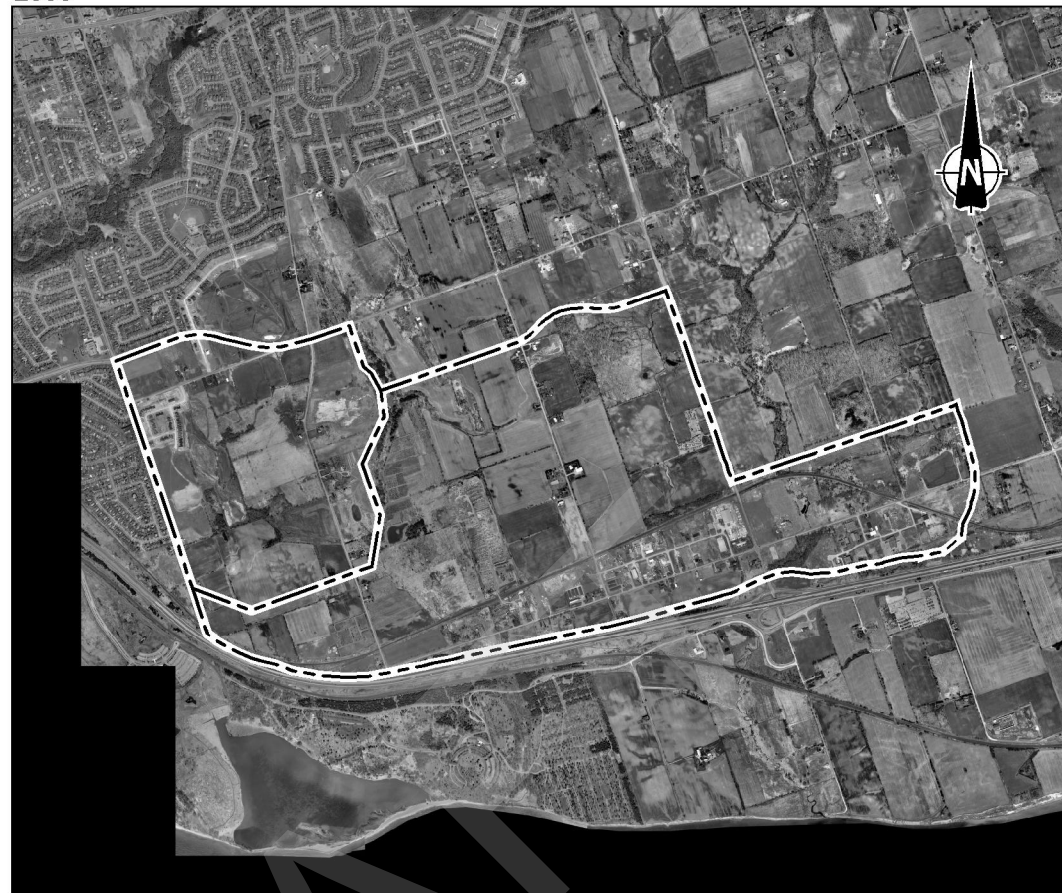
TITLE	SOILS OF DURHAM COUNTY
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	PROJECT No.	18109797	FILE No.	18109797-R01002	
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	CHECK			MAP 4	

1954



2000



2010



DRAFT



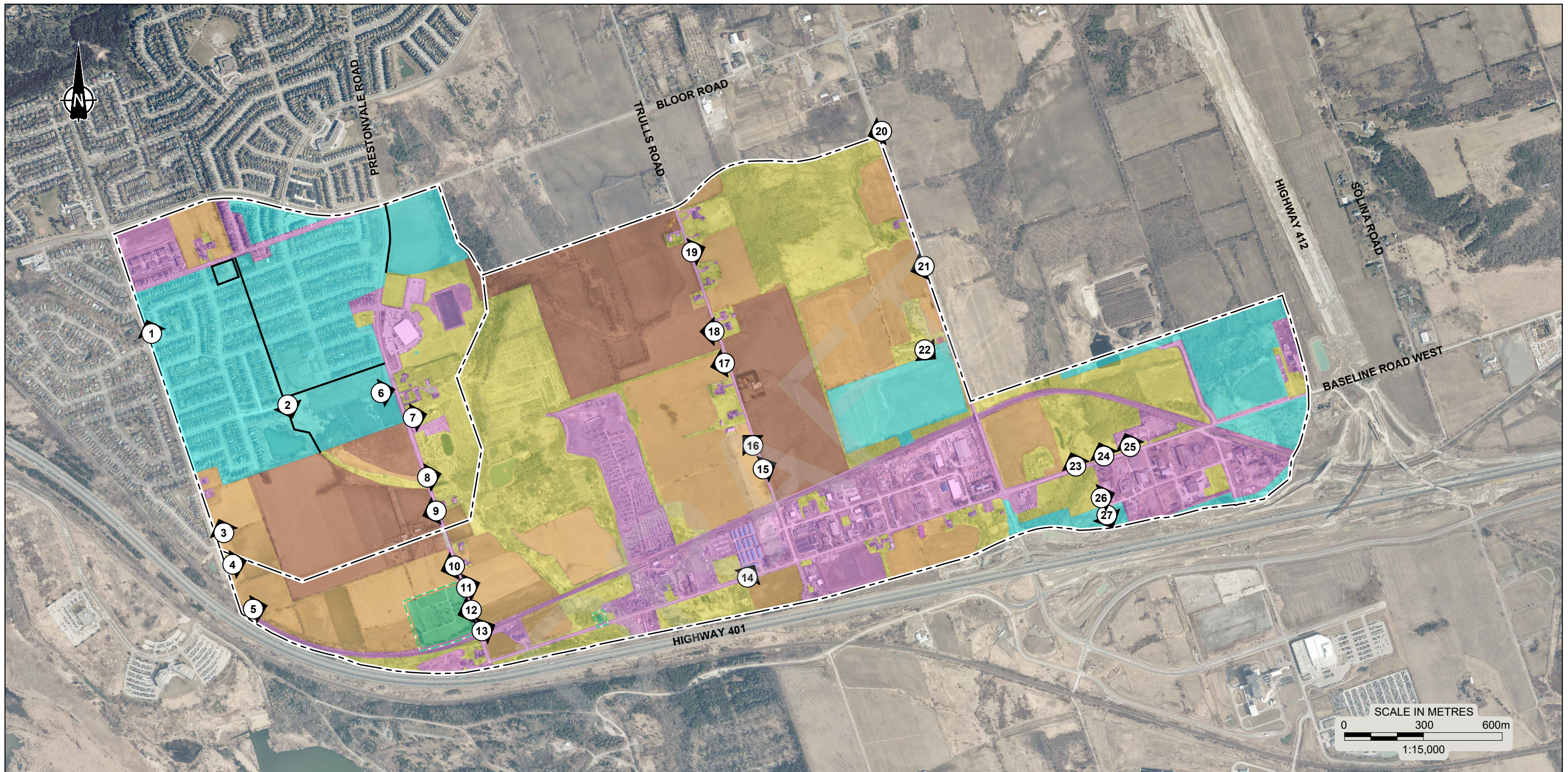
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DRAWING BASED ON DATA PROVIDED BY THE MUNICIPALITY OF DURHAM.

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ALL LOCATIONS ARE APPROXIMATE.

PROJECT				STAGE 1 ARCHAEOLOGICAL ASSESSMENT COURTICE EMPLOYMENT LANDS AND SOUTHEAST COURTICE SECONDARY PLAN AREAS MUNICIPALITY OF CLARINGTON, DURHAM COUNTY, ONTARIO			
TITLE				1954, 2000 AND 2010 AERIAL IMAGERY			
PROJECT No.		18109797		FILE No.		18109797-R01005	
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CHECK		Nov 18/19		REV.			
				<p style="text-align: center;">MAP 5</p>			



LEGEND

- APPROXIMATE LOCATION OF STUDY AREA
- PHOTOGRAPH LOCATION, VIEWING DIRECTION, AND PLATE NUMBER
- AREA PREVIOUSLY ASSESSED; NO STAGE 2 RECOMMENDED
- AREA OF PREVIOUS DISTURBANCE; NO STAGE 2 RECOMMENDED
- AREA OF ARCHAEOLOGICAL POTENTIAL; STAGE 2 TEST PIT SURVEY AT 5m INTERVALS RECOMMENDED
- AREA OF ARCHAEOLOGICAL POTENTIAL; STAGE 2 PEDESTRIAN SURVEY AT 5m INTERVALS RECOMMENDED
- AREA OF ARCHAEOLOGICAL POTENTIAL; CEMETERY
- 10m PROTECTIVE BUFFER
- AREA OF PREVIOUS OR PENDING STAGE 2 ASSESSMENT; IN PROGRESS, AWAITING MHSTCI REVIEW

REFERENCE

DRAWING BASED ON DATA PROVIDED BY THE MUNICIPALITY OF DURHAM.

NOTES

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PROJECT		STAGE 1 ARCHAEOLOGICAL ASSESSMENT COURTICE EMPLOYMENT LANDS AND SOUTHEAST COURTICE SECONDARY PLAN AREAS MUNICIPALITY OF CLARINGTON, DURHAM COUNTY, ONTARIO	
TITLE		STAGE 1 ARCHEOLOGICAL POTENTIAL	
PROJECT No. 18109797		FILE No. 18109797-R01006	
CADD ZJB Jan 21/20		SCALE AS SHOWN REV.	
CHECK		MAP 6	



Signature Page

Golder Associates Ltd.

DRAFT

Kendra Patton, MA
Project Archaeologist

KP/HD/BD/ly

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Bradley Drouin, MA
Senior Archaeologist, Associate

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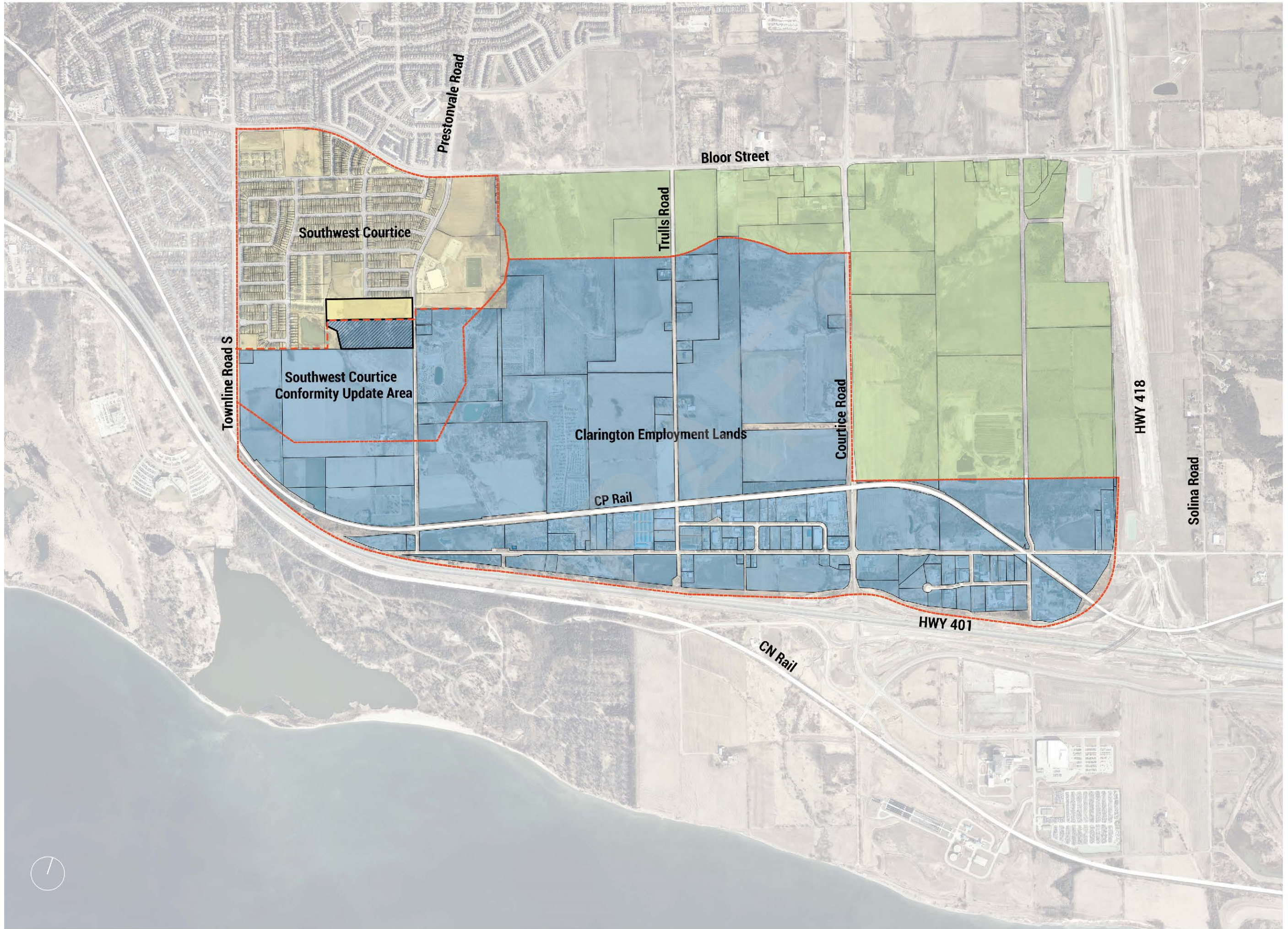
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APPENDIX A

Development Map

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